

QUALITY TEACHING AND SCHOOL LEADERSHIP

A scan of research findings by Louise Watson

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The Lifelong Learning Network

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Executive Summary

Teacher quality

The research on teacher quality – as measured in terms of student learning outcomes – reveals that teachers vary in their effectiveness, but simple indicators, such as year of experience or level of qualifications are inadequate measures. The most powerful indicators of teacher quality are expertise in relevant subject content studies *coupled with* skills in teaching and learning.

These characteristics – strong subject content knowledge and skills in teaching and learning – are acquired initially through teacher preparation courses and professional development during their careers. Thus, any effort to raise the standard of teacher preparation in these areas is likely to have an impact on the capacities that teachers bring to their work, and the quality of teaching in schools.

Teacher preparation

Many reviews suggest that teacher preparation courses could be improved both in their subject content studies and in their development of pre-service skills in teaching and learning. To provide a greater emphasis on subject content knowledge, teacher education faculties require stronger links than they do currently with discipline studies in universities. The literature suggests that the best way to improve skills in teaching and learning is through more extensive professional experience in schools.

The concept of professional education may be a useful framework for considering the reform of teacher preparation courses. It suggests that the role of teacher education faculties is to provide expertise in teaching and learning, grounded in teaching experience and professional practice. Through this expertise, they provide a bridge between the discipline studies that pre-service teachers must undertake – the traditional domain of universities – and the practice of teaching and learning in schools.

There is evidence that teacher preparation courses have suffered resource constraints over the past decade and this may have weakened their links with schools. Nevertheless, some teacher education providers have been able to expand their professional experience component (within budget) through partnerships with schools and education authorities where these stakeholders meet some of the cost. Possible ways to reduce the costs of preparing teachers could include:

- rationalising the number of institutions offering teacher education;
- reducing the high cost of professional experience (through increasing the contribution of schools and education authorities); and
- reducing the wastage rates from teacher preparation courses (ie. through more careful selection, early exposure to schools, and the provision of exit points to other courses).

Students enrolled in teacher preparation courses are predominantly female and are more likely to be “first generation” tertiary students than those in other courses. A higher proportion also come from non-metropolitan regions. There is no substantive research on the desirable characteristics of students who are to become teachers. Such research might assist in the more effective selection of students and could reduce the wastage rates from teacher preparation courses.

Professional experience

Researchers know very little about the pedagogy of teacher education – how pre-service teachers learn to be good teachers. Nevertheless, pre-service teachers appear to endorse the view that spending more time in schools engaged in a range of professional experiences improves their professional learning and makes them more “school ready”. On the other hand, solely school-based teacher education carries the risk of becoming an unproductive means of socialisation rather than the basis for lifelong professional learning. Professional experience must involve more than simply experiencing the norms of a typical classroom. It should encourage pre-service teachers to reflect on their experiences and to integrate their practical insights with theoretical knowledge about teaching and learning.

New models of professional experience offer pre-service teachers opportunities to engage in teaching and learning in varying degrees of intensity, such as: shadowing professional teachers in a school; undertaking legitimate peripheral participation activities (ie. specific learning projects); and practice teaching (the traditional practicum). Student teachers also appear to appreciate the opportunity to work in schools for a sufficient length of time to build on-going relationships with teachers and students. The traditional practicum (a set period of supervised student teaching) is now considered insufficient for the effective professional education of student teachers, but should be offered in conjunction with varieties of professional learning.

Partnerships for professional education

Much of the criticism of the current arrangements for the supervision of the practicum could be addressed through stronger partnerships between universities and schools. But the research suggests that there are few *authentic* partnerships in professional teacher preparation. The traditional tension between theory and practice is more likely to result in partnerships that are hierarchical (where universities control the content and purpose of professional experiences) and separatist (where school practitioners are given responsibility for only the practical aspects of professional learning). Such partnerships stifle opportunities for professional collaboration between practicing teachers and teacher education academics, thus limiting the prospects for building new professional knowledge.

The research highlights the many barriers to *authentic* collaboration between schools and universities – both attitudinal and structural. The general theme of the research is that partnerships between schools and universities are worth the effort – because they improve the quality of professional learning in teacher preparation courses – but that genuinely collaborative partnerships can be difficult to achieve.

The evidence suggests that authentic partnerships must be built around shared practices and shared work, which then provide the basis for consistent, sustained and valued interaction between teacher educators and professional teachers. This means that teacher education academics should be more involved in the professional practice of teaching, and that practicing teachers should be more involved in course delivery and research in universities. The Professional Development Schools in the USA are a useful model of authentic partnerships in this sense. Any reform of teacher education in this direction in Australia will need the full support of industry partners, such as school authorities.

Standards for professional teachers

There has been widespread debate on the issue of professional standards for teachers for over a decade in Australia, leading to a consensus that professional standards – developed and “owned” by professional teachers – have the potential to improve the quality and status of teaching and to support teachers’ professional learning. From overseas experience, we know that entry-level standards are useful in identifying effective teachers for employment, and advanced standards are successful in identifying practicing teachers who are performing at a high level. But the potential of professional standards to improve student learning depends on both the quality of the standards and the way in which they are used. Professional standards – developed and “owned” by professional teachers – are likely to have most impact on the quality of teaching and learning, when they are applied to specific purposes, such as:

1. setting conditions of entry to the profession (a licence to practice);
2. supporting teachers’ professional development throughout their careers and providing a basis for recognising and rewarding teachers who attain advanced standards; and
3. the application of sanctions (from warnings through to de-registration) to practitioners who are found guilty of professional misconduct or who fail to meet professional standards.

Statements of standards for professional teachers indicate what teachers are expected to know and do in the areas of professional knowledge and professional practice. As statements of professional standards indicate the skills and accomplishments associated with effective teaching, they are useful for aspirational purposes and provide a structure to support teachers’ continuing professional development. Sets of standards vary in their level of detail, depending on the purpose they serve. A key purpose of professional teaching standards is to determine entry-level criteria for employment as a teacher and entering the teaching profession. Standards are also useful to support career progression and professional development. Detailed sets of standards, such as those developed by the National Board of Professional Teaching Standards in the USA appear necessary for the assessment of accomplished teaching practice, particularly to support the process of peer review.

The application of entry-level standards for professional teachers is common in most countries, although many jurisdictions in the USA do not apply the standards in times of teacher shortage. Over the past five years in Australia, teacher registration authorities have been established or announced in every state and territory, for the primary purpose of regulating the employment of teachers. The main mechanism through which teacher registration authorities certify entry-level teachers is through the accreditation of pre-service teacher preparation courses. While some employing authorities in the USA require teachers to pass a test as a requirement for certification, there is little evidence to suggest that this practice is effective in identifying competent teachers and it is not employed in Australia.

The national framework for professional teaching standards issued by MCEETYA in 2003, proposed four stages of career progression (career dimensions) for professional teachers:

1. Graduation – beginning teachers equipped with the skills to engage in and negotiate a process of on-going professional learning.
2. Competence – effective teachers granted full entry to the profession based on successful teaching experience.

3. Accomplishment – teachers who are highly accomplished and highly regarded by their peers. They engage in on-going professional learning and contribute to the professional learning of their colleagues. They interact professionally with diverse audiences and the community.
4. Leadership – transformative professionals with a record of outstanding teaching, a commitment to on-going professional development, and a talent for applying problem-solving skills to educational problems. Effective communicators with the community and their profession.

At this stage, professional associations are not widely engaged in using professional standards as a mechanism to support professional development and career progression in association with employers. The exceptions are American employing authorities that award salary increases to NBCTS – certified teachers, and the Scottish General Teaching Council's role in determining who is awarded Chartered Teacher Status. In Australia, at this stage the New South Wales Institute of Teachers is the only registration body to identify four stages of career progression within its framework of professional teaching standards, based on the MCEETYA framework. In general, the assessment of accomplished teaching remains the responsibility of employing authorities and may only be partially based on professional standards. Nevertheless, the model of assessing accomplished teaching developed by the National Board of Professional Teaching Standards in the USA is respected by teachers and is gradually gaining recognition among employers as a tool for making decisions about recruitment, pay incentives and career progression among accomplished teachers.

As professional standards define the conduct expected of a professional teacher, they may be used to sanction or de-register teachers who are failing to perform at the expected standard. Professional standards are used in this way in Australia and overseas. The Ontario College of Teachers and the Teaching Council of Scotland are associations which have the power to de-register teachers if they are found guilty of professional misconduct or are unfit to practice. Several of the recently established teacher registration bodies in Australia also have the power to play this role. The Victorian Institute of Teaching, in particular, has extensive responsibilities for investigating complaints made against its members. Investigating complaints against their members for failing to maintain standards is one further way in which professional standards may be used to enhance the quality and status of teaching. And there is some evidence of a willingness on the part of employers to transfer responsibility for this role to teacher registration authorities or other professional associations.

A self-regulating profession

Professional teaching standards may be used to elevate the quality and status of teaching in many different ways. Given the overlap of roles and responsibilities between commonwealth and state governments in the area of teacher professionalism, it is unlikely that all the roles relating to the development and implementation of professional standards for teaching will be carried out by one agency at either the state or the commonwealth level. The role of the National Board for Professional Teaching Standards in the USA illustrates one way in which a national professional body can work to enhance the professional development and career progression of

teachers, with the co-operation of state employing authorities. Ultimately the potential of a professional body to support its members through the development of professional standards depends on the extent to which employers recognise and support its role. There is currently in Australia no national professional body that can undertake such a role.

School leadership

It is difficult to demonstrate that leadership makes a difference to the quality of school education, because of the number of variables that influence student learning outcomes. The impact of leadership on learning outcomes is often indirect because effective leaders work through others (ie. teachers) to achieve results. When these factors are taken into account, research suggests that the total (direct and indirect) effects of leadership on student learning accounts for about a quarter of total school effects. Leadership effects are second only to teacher effects in their impact on student learning. The research also suggests that leadership effects are usually greater in underperforming schools. In other words, it is unlikely that an under-performing school will be “turned around” without the intervention of an effective leader.

Over the past two decades, the literature has evolved from studies of educational leadership that focused on people in positions of authority – particularly school principals – to studies of whole school change that emphasise the need for leadership to be distributed among many members of the school community. The concept of instructional leadership (ie. leadership in teaching and learning) is important but is now recognised as not sufficient to guarantee school effectiveness in a more complex educational environment. Although the goal of sustainable school change is a common objective in contemporary leadership research, advocates of transformational leadership continue to emphasise the key role of school principals as agents of change. While acknowledging that many leadership functions should be performed at every level of an organisation, proponents of transformational leadership argue that it is important for some functions to be attached to leaders in formal positions of authority.

There is no single style or set of leadership behaviours suited to all contexts and effective leaders often behave quite differently (and productively) depending on the context in which they are working. Leadership is also a social concept in that it seeks to accomplish something for a group of people. Effective leadership by school principals is invariably indirect because it influences processes that impact on student learning, such as academic expectations, school mission, student opportunity to learn and instructional organisation. At the most simple level, effective leaders perform two generic functions: they *provide direction*, by helping the organisation to set a defensible set of goals; and they *exercise influence* over members of the organisation to move in that direction.

There are many practices associated with effective leadership in schools. At least 21 practices associated with balanced leadership have been identified in the research literature over the past thirty years. These practices can be grouped under three broad categories which have been described as “the basics” of successful leadership today. In an era that requires schools to be sites of educational reform and continuous improvement, effective leaders must be capable of: setting directions; developing people; and re-designing the organisation.

Leadership learning

Many leadership learning programs are criticised for being short-term and *ad hoc* in nature and not customised to meet an individual's learning needs at different stages of their career. New leadership programs that aim to support leaders throughout their working lives should be:

- long-term rather than episodic;
- job-embedded rather than detached;
- carefully planned with a coherent curriculum; and
- focused on student achievement.

In Australia, a range of organisations is involved in the provision of leadership learning at both the national and state level. In South Australia and Western Australia, the state governments have established leadership centres that are working towards the systematic provision of leadership development. There is a range of short courses provided in specific skills development, some accredited post-graduate qualifications and some evidence of leadership courses being targeted to particular stages of a leader's career.

Professional development for teaching

For many years, school systems have under-invested, compared to other professions and industries, in professional development for staff and have failed to support professional learning on a sustained basis. The pace of educational change puts pressure on professional development budgets to deal with immediate issues – such as behaviour management, standards-based assessment and the introduction of information and communications technologies (ICT) – often at the expense of sustained long-term professional development. Research suggests that inadequate professional development: increases teachers' sense of isolation; fails to meet their professional learning needs; reduces opportunities for teachers to collaborate and learn from each other; and gives them little time to assess and make use of the extensive range of curricular materials available.

The movement for standards-based school reform provides a strong impetus for the provision of continuous professional development for teachers that – with adequate funding and effective leadership – may support the transformation of schools into professional learning communities. Research suggests that, in the context of improving student learning in schools, effective professional development provision should have the following features. It should:

- be aligned with the clearly defined mission and purpose of the organisation;
- be based on content-specific analyses of student learning;
- be focused on specific issues of curriculum and pedagogy;
- identify learning outcomes;
- develop, reinforce and sustain group work;
- depend on the active participation of school leaders and staff;
- have a sustained focus over time, eg. develop a culture of continuous professional development (CPD);
- offer models of effective practice; and
- use assessment and evaluation.

Introduction

Since 1983, when a United States President cast doubt on the quality of public schooling in *A Nation at Risk*, schools throughout the Western world have been under pressure about an alleged decline in education standards. The “standards movement” has generated debate about ways to increase the quality of schooling, and has resulted in concrete reforms such as increased choice between schools and more accountability for educational outcomes – usually in the form of standardised tests. It has also cast a spotlight on the quality of teachers. For two decades, the issues of teacher professionalism and teacher quality have been the subject of extensive public debate and research.

Teacher quality has been the focus of many government reviews in Australia. The report of the review of teacher education in New South Wales identifies twenty relevant reports on teacher quality over the previous twenty years. Many of these reports dealt with the issues of teacher quality and professional standards and twelve focused specifically on teacher education (Ramsey 2000: Appendix 7). Since the Ramsey report on teacher education was released in 2000, the Commonwealth Department of Education, Science and Training has completed an inquiry into Australian teachers chaired by Professor Kwong Lee Dow (2003). An inquiry into pre-service teacher training was recently completed by the Education and Training Committee of the Victorian Parliament (report released in February 2005). The Education Committee of the Commonwealth House of Representatives has also commenced its own inquiry in 2005.

Cochran-Smith and Fries (2001) suggest that in response to the standards movement, two distinct policy agendas emerged regarding what should be done to improve the quality of teaching.

The first agenda was to improve the *professional status* of teachers, by professionalising teaching and teacher preparation courses. This involved arguing for higher status and remuneration for teachers, improved opportunities for professional development, and higher levels of formal educational qualifications. In Australia, the case for increased professionalism was put by a Senate Inquiry into the Status of Teaching, that tabled a report called *A Class Act*, in 1998. Exploring the concept of professionalism, the report examines the issues of teachers’ status, teachers’ salaries, teachers’ workload, professional development, teacher education and induction, teacher registration and professional standards for professional teachers (Senate 1998). The Ramsey Report for New South Wales also emphasised the need for teaching to develop a “professional structure”. He argued that such a structure was necessary to better define the roles of universities and employers in regard to teacher education, as well as to cultivate leadership and a professional culture among practicing teachers (Ramsey 2000: 14).

The second agenda, pursued with some vigour within the USA and the UK was to *de-regulate* teacher education. This involved undermining the monopoly of teacher education institutions over teacher preparation and directing funding for teacher education to other authorities, such as schools. This school of thought argued that university-based teacher preparation programs were out of touch with schools and did not prepare teachers adequately for the reality of classrooms. In the UK, the national government assumed control over all aspects of teacher education and moved between 50-75 per cent of the time for teacher preparation into schools. In the USA, the national government introduced a Teach for America Program that required only five weeks teacher training for graduates. Garm and Karlsen (2004) suggest that these trends in the USA and UK should be described as “de-professionalisation” of teachers.

Judyth Sachs points out that these policy reforms produced a set of paradoxes about “the nature teaching as a profession and about the professional identity and professional development of teachers” (Sachs 2002: 150). She identifies three paradoxes for professional teachers:

1. that the call for teacher professionalism is occurring while “there is evidence that teachers are being deskilled and their work is intensified”;
2. in spite of the acknowledgement that re-thinking classroom practice is extremely demanding, fewer resources are now allocated to teacher learning; and
3. the teaching profession is being exhorted to be more autonomous at the same time as it is expected to be more accountable and to maintain standards.

(Sachs 2002: 150)

In 2001, Sachs argued that debates about teacher professionalism are influenced by competing discourses, that the concept of teacher professionalism was yet to be clearly defined and that it remained the site of academic and ideological struggle between key stakeholders such as union leaders, bureaucrats and academics. She said, “there is no singular version of what constitutes professionalism or teaching as a profession that is shared by these diverse groups” (Sachs 2001: 150).

Nevertheless, there is now an emerging consensus about the vital role of schools in the knowledge-based economy, and a policy concern that schools are equipped to succeed in the more complex economic and social environment of the 21st Century. In this context, the role and status of professional teachers is receiving more attention, with a view to ensuring that we have a highly skilled and professional teaching force that is capable of leading schools in the future (Crowther *et al.* 2003).

The research

Research does not occur in a vacuum but is influenced by the policy environment in which it takes place, as well as the way in which it is funded. The direction of research on teacher education over the past two decades has been influenced by a heightened political focus on education standards and the reform agendas pursued by governments, as well as structural factors that have changed the nature of teacher education provision within universities. The influence of these contextual factors is apparent in the research output that is considered in this report.

This report discusses the research effort in teacher education in terms of four central issues:

1. Quality initial teacher preparation
2. Effective links between teacher education programs and schools
3. The use of advanced standards for school leadership and accomplished teaching
4. Approaches to leadership learning and professional development for teaching

Each chapter focuses on one of the above issues and provides an outline of the main research evidence in each area, both nationally and internationally, indicates on-going research, highlights gaps in the research output, and summarises the main research outcomes. The report cites all the studies surveyed, but as citations can disrupt a reader’s train of thought, to enhance readability we have placed all citations at the end of paragraphs, where practicable.

I. Quality teacher preparation

In addressing the issue of quality teacher preparation, we asked the research question, “does the quality of teaching matter?” and if it does, “what makes a high quality teacher?”

Does the quality of teaching matter?

Many researchers have tried to measure the contribution of different inputs (like student background, teacher characteristics) to student outcomes in schools. Such studies of the “education production function”, try to determine the impact of specific measured teacher or school characteristics (such as teacher experience, teacher education, class size, per pupil expenditures etc.) on student achievement. This type of research is problematic because so many factors influence the production of educational outcomes, that it is difficult to take them all into account. The obvious confounding influence is student characteristics (social class, parental education etc.) that are known to make a substantial contribution to student achievement. Nevertheless, most researchers attempt to take this into account, by controlling for student background characteristics.

In the context of the standards movement during the 1980s, research on the education production function was put to new purposes, namely to argue that schools – and teachers – make little difference to a students’ educational outcomes. In 1986, Eric Hanushek reviewed the education production function literature and found little reason to believe that measured teacher characteristics such as educational preparation, experience, or salary were related to student achievement (Hanushek 1986). But subsequently, other reviewers of the same literature argued that some studies suggested positive effects from teacher experience and teacher education (Greenwald, Hedges and Laine 1996).

In general, researchers in the economics of education accept that it is difficult to interpret the relationship between teacher characteristics and student achievement, due to:

- the confounding influences of unobserved individual, neighbourhood and school factors; and
- the difficulty of measuring teacher characteristics – researchers rely mainly on measurable characteristics such as qualifications or years of experience, whereas other characteristics, of a more qualitative kind are probably more important (see Hattie 2003).

Another strategy to produce evidence about teacher effects is to measure the variation in student achievement between classrooms, controlling for student background and prior attainment. A North American study involving teachers and students who were randomly assigned to classes, found a substantial amount of variation in student achievement to suggest that teachers do have an effect on student achievement, with larger effects on mathematics than in reading. The teacher effects were larger than school effects and there was a larger teacher effect variance in low-SES schools than in high-SES schools. (Nye, Konstantonopouls and Hedges 2004).

The finding that teachers vary in their effectiveness could suggest that there is scope for improving the quality of teachers to make their impact on student achievement more uniform. The finding that teacher effects are larger than school effects implies that strategies to improve the quality of teaching are more likely to improve student outcomes than strategies which aim to substitute one school for another (school choice) or to change the structure of schooling (eg. devolution of school management). On the other hand, if one assumes that variation in teacher effectiveness is the result of *innate* differences in teachers (ie. characteristics that cannot be altered by education or experience), the policy implication may simply be to remove less effective teachers from schools.

Barbara Nye and her colleagues concluded that the observed variation in teacher effects could not be explained by variation in the years of experience or the education level (holding a Masters degree or not) of the teachers. This does not necessarily imply that teacher effectiveness is an innate characteristic but could mean that simple indicators – such as years of experience or level of qualification – are inadequate measures of teacher competence and that other measures of teacher quality are required.

What makes a high quality teacher?

A problem with the body of research on the quality of teaching is the lack of evidence about what constitutes teacher quality. Some researchers assume that teacher quality is indicated by the *academic abilities* of teachers, measured by their university entrance scores or their achievement at college. One recent US study combines data from four longitudinal surveys, spanning the early-1960s to the mid-1980s, and finds that the fraction of teachers in the top two achievement deciles fell markedly during this era (Corcoran, Evans and Schwab 2004). Although many studies assume that academic achievement is a measure of teacher quality, there is little conclusive evidence to support this view. Two reviews of studies into the link between teacher's academic ability or IQ and their students' achievement found little or no relationship between the two (Schalock 1979, Soar, Medley and Coker 1983).

We might also assume that a teacher's *knowledge of their subject matter* would contribute to their relative "quality", but the research findings are not conclusive. Researchers who summarised the results of many studies in this area found that teacher subject knowledge – measured by either a test or the number of courses taken in the subject area – was not consistently related to teacher performance, as measured by student outcomes or supervisory ratings (Byrne 1983, Ashton and Crocker 1987). Grossman suggests that strong subject content knowledge can have a mixed impact on the quality of teaching. On the one hand, if teachers have specialised in one particular subject, they are more likely to place emphasis on the content area of that subject, at the expense of other subjects about which they know less. On the other hand, depth of content knowledge has a positive influence on teaching strategies, because strong content knowledge allows a teacher to use more interactive approaches to learning, and construct high quality explanations, questions and activities for students (Grossman 1994). Linda Darling-Hammond concludes that the results are mixed because subject matter knowledge is a positive influence up to some level of basic competence in the subject, but that the benefits of subject mastery diminish thereafter (Darling-Hammond 2000).

A teacher's *knowledge of teaching and learning*, on the other hand, is more likely to be correlated with their effectiveness. Many US studies have found that the amount of education coursework (ie. mathematics methods, science education) undertaken by teachers was more highly related to student performance than the number of credits in subject courses (ie. maths, science) or other indicators of preparation (Monk 1984, Ferguson and Womack 1993).

The interaction between subject content knowledge and effective teaching is highlighted by Grossman (1994). Linda Darling-Hammond suggests that any positive effects from a teachers' knowledge of their subject matter are augmented by knowledge of how to teach the subject to various kinds of students. In other words, "the degree of pedagogical skill may interact with subject matter knowledge to bolster or reduce teacher performance" (Darling-Hammond 2000: 5).

Using data from a comprehensive survey of both qualitative and quantitative studies across the USA, Darling-Hammond assessed the impact of teacher quality – measured by certification status, college major and master's degrees – on student performance. While her study confirmed that a teacher's possession of a master's degree appeared to have little impact on learning outcomes, she also found that the percentage of teachers with full certification and a major in the relevant field was a powerful predictor of student achievement, particularly in reading and mathematics. Certification status refers to state licensing schemes where teachers are certified when they have:

- completed a state-approved teacher education program;
- completed either a major or a minor in the fields to be taught;
- received 8 to 40 education credits; and
- completed 8 to 18 weeks of student teaching.

Most state certification requirements also include one or more tests of basic skills, subject matter knowledge, and/or teaching knowledge or skills, as the basis for the initial or continuing licence, or for admission to teacher education. As 30 states still allow the hiring of teachers who have not met their licensing standards, it is possible to conduct research that surveys the learning outcomes from licensed and un-licensed teachers, while controlling for other factors such as student characteristics. These studies contribute to Darling-Hammond's finding that relevant subject content studies coupled with skills in teaching are the most powerful indicators of teacher quality. "It stands to reason that student learning should be enhanced by the efforts of teachers who are more knowledgeable in their field and are skillful in teaching it to others" (Darling-Hammond 2000: 35).

The most powerful indicators of teacher quality are relevant subject content studies *coupled with* skills in teaching.

In a review of research findings on excellent teachers, John Hattie identified five major dimensions which differentiated expert from experienced teachers. Expert teachers can:

1. identify essential representations of their subject;
2. guide learning through classroom interactions;
3. monitor learning and provide feedback;
4. attend to affective attributes; and
5. influence student outcomes.

(Hattie 2003)

In summary, the research suggests that the quality of teachers does make a difference to the educational outcomes of their students. But simple variables such as the qualifications of teachers – particularly their possession of higher degrees – are not a good indicator of teacher quality. Rather, the extent to which the teacher has studied the content of the subject to be taught and their level of skill in teaching is a stronger indicator of teacher quality. These characteristics are not innate, but are acquired through teacher preparation courses and professional development. The clear implication for government is that “policies adopted by states regarding teacher education, licensing, hiring and professional development may make an important difference in the qualifications and capacities that teachers bring to their work” (Darling-Hammond 2000: 1).

Content of teacher preparation courses

The research discussed above establishes that teacher preparation courses are an important factor in preparing teachers of a high quality, and that course content such as subject matter knowledge and skills in teaching are important in this regard. But beyond this, as Kwong Lee Dow points out, “there is no single model of teacher education that is clearly the most effective way of preparing teachers” (Dow 2003 Vol. 1: 34). Gregor Ramsey’s review of teacher education in New South Wales also noted the difficulty of establishing dimensions of best practice in teacher education, concluding “there is no capacity to measure and describe teacher education programs in terms of the quality of their performance, from early childhood to secondary and vocational education” (Ramsey 2000: 54).

On the other hand, teacher preparation courses are often criticised for not adequately preparing teacher education students for the tasks that teachers are now expected to fulfil. (OECD 2004: par.237). These criticisms tend to focus on the link between theory and practice in teacher preparation courses and argue that more practical experience would assist in better preparing student teachers. However, as the following discussion illustrates, practical experience on its own will not be adequate to prepare teachers for a lifetime of professional teaching.

Teacher preparation courses generally involve three broad components – subject matter, learning theory (pedagogy), and professional experience (the practicum). In some teacher preparation courses, these three elements are integrated, but traditionally, they have been separate. A dominant theme in the literature is the struggle to integrate all three, and the tensions between them.

There may be a fundamental tension in teacher preparation courses between academic, theory-based knowledge and knowledge derived from practice. In other words, there are competing versions of what constitutes “true knowledge” in teacher education circles. Garm and Karlsen suggest that the source of this tension lies in the academic tradition of universities, which emphasises a strong subject content knowledge as a pre-requisite for effective teaching, as opposed to the “seminary” tradition of teachers colleges which was oriented in practice and had “a more social and cultural perspective” (Garm and Karlsen 2004: 741). Gregor Ramsey implies that teacher preparation courses have lost their way in both respects. In terms of subject content knowledge, “teacher education is less connected to the other disciplines in universities than it has ever been” and teacher preparation courses do “not generally operate within models which make strong connections with schools” (Ramsey 2000: 24, 38).

In Norway, teacher education reforms renewed the focus on subject content knowledge because politicians suggested that “that teacher students have insufficient knowledge of the subjects they teach”. The Norwegian reforms also emphasised professional experience and ensured that pre-service teachers spent more time in schools. Thus teacher education reforms in Norway during the 1990s heightened the emphasis on subject content, particularly literacy and mathematics, increased the time spent on professional experience (the practicum), and gave less emphasis to pedagogy (Garm and Karlsen 2004: 741).

Government reforms that place a higher value on one element of teacher education at the expense of another element may be missing the point. The literature on teacher quality suggests that it is the relationship *between* subject content knowledge, learning theory and professional experience that is important for teacher effectiveness, rather than any of these elements on its own. For example, a large amount of time spent on professional experience is worthless, if the student teacher does not possess sufficient content knowledge or learning theory to turn that knowledge into effective teaching practice. If the student is well-prepared in terms of subject knowledge and learning theory, their professional experience is critical for transforming those studies into effective teaching. The research suggests that the quality of professional experiences for students could be greatly improved in this regard, through more effective links between teacher education programs and schools, as discussed in the following chapter.

Lawrance and Palmer suggest that subject content studies in science need to be well-taught if they are to be translated into effective teaching. They point out that many teachers’ negative attitudes towards science and mathematics are based on their experience of how the subjects are taught in universities. For example, most teachers had experienced science as a “body of facts to be learnt”, rather than a process of inquiry. Yet inquiry-based instructional methods are one of the most effective ways of engaging students in science. Ramsey argues that subject content knowledge and learning theory (pedagogy) should be more closely related in university studies. “Inordinate interest exists in universities in the school curriculum, especially in the Higher School Certificate, but . . . when the question is asked about the pedagogy needed to teach a prepared syllabus, the discipline areas have little to offer”. Ramsey cites one example – the History Department at Macquarie University – as an exception in that they see one of their core responsibilities as the quality of history teaching in schools. He suggests that structures and processes must be developed which engage the disciplines with teacher education so that universities that are at the forefront of their discipline are also experts on the pedagogy required to pass on major concepts to others, particularly at the school level (Lawrance and Palmer 2003: 56-57; Ramsey 2000: 13, 37).

A common theme associated with the standards movement is the accusation that teacher education programs are “out of touch” with the daily practice of schools and thus are inadequate to prepare pre-service teachers for the realities of the classroom. The Victorian Inquiry into pre-service teacher training suggested that the content of teacher preparation courses was deficient in the following areas:

- classroom management skills
- development of classroom resources
- student assessment and reporting strategies
- time management skills

- organisational skills
- acceptable professional conduct
- developing professional relationships
- understanding what school communities expect
- methods and techniques for responding to the learning and other needs of students with various learning abilities, disabilities and other special needs, including the specific requirements of culturally and linguistically diverse classrooms
- specific strategies to improve literacy and numeracy standards
- the ability to integrate the use of ICT across the school curriculum
- knowledge of VCAL, VET in schools and other applied learning pathways at the secondary level.

The issue of preparing teachers for managing modern classrooms – with particular reference to management of student behaviour – is a common theme in the literature. According to a survey of teachers by the Australian College of Educators, “students have become less biddable, more demanding, less respectful, less motivated and harder to teach.” The report links these problems to increasing retention rates which has resulted in a greater mixture of abilities in secondary school classrooms, and to changes in family structures (Anderson 2003). American surveys conducted by Public Agenda report half of all high school students as saying that teachers spend more time trying to keep order in the classroom than teaching students (Johnson and Duffett 2003: 26).

There is a general belief that issues of classroom management are not taken seriously in teacher preparation courses. The Public Agenda surveys indicate that only about a third of education professors say that their program places a lot of emphasis on teaching future teachers how to manage a rowdy classroom or that maintaining discipline and order is an absolutely essential skill to impart to prospective students. “Most education professors believe that when a teacher faces a disruptive class, it probably means they have failed to make lessons engaging enough for the students.” The American surveys also report that 59 per cent of school principals find too many new teachers lack skills in classroom management and student discipline (Johnson and Duffett 2003: 26).

In summary, many reviews suggest that teacher preparation courses could be improved both in their subject content studies and in their development of pre-service skills in teaching and learning. To provide a greater emphasis on subject content knowledge, teacher education faculties require stronger links than they do currently with the discipline studies in universities. The literature suggests that the best way to improve skills in teaching and learning is through more extensive professional experience in schools.

Teacher education and professional practice

The common response to the alleged deficiencies in teacher preparation for the realities of the classroom is to recommend a greater focus on the practical aspects of teaching in teacher preparation courses. The Victorian Committee suggested that the gaps it identified in teacher preparation (listed above) may be the product of

course structures that treated these areas as elective units of study. It recommended that the content of pre-service courses be the subject of closer scrutiny by the Victorian Institute of Teaching and other stakeholders. The Victorian Committee of Inquiry argued that teacher preparation courses should pay greater attention to:

- the practical aspects of teaching;
- the integration of practical experience into teacher preparation courses; and
- modeling of effective teaching practices during teacher preparation courses.

The Victorian Committee endorsed the following strategies for improving the effectiveness of teacher preparation courses:

- pre-service teaching methods such as problem-based learning and school-based research projects;
- a “balanced mix” of teaching by academics and outstanding practicing teachers;
- more school-based delivery, particularly of ICT subjects;
- increasing the practicum to 130 days for undergraduates and 80 days for postgraduates; and
- common standards for the design, management and assessment of practicum programs. (Parliament of Victoria 2005: Chapters 4, 5 and 6).

Kwong Lee Dow’s report suggests that many universities are re-shaping teacher education programs to provide the necessary foundations for entry into the modern profession of teaching. Effective teacher education programs in this mould, have the following characteristics:

- recognition of prior experiences and non-formal learning;
- an emphasis on the role of the teacher as an expert knowledge manager and guide of students’ learning;
- pedagogy based around inquiry methods and problem-based learning;
- developing skills for collaboration in teams and through partnerships;
- reflective and adaptive teaching practice based on evidence and grounded in practical experience;
- enhancing diversity within the teaching profession through non-standard entry pathways;
- redefinition and linking of teaching levels, notably primary to secondary; and
- stronger partnerships between universities, schools, employing authorities and unions (Dow 2003.Vol 1: 34).

One response to the perceived inadequacies of teacher preparation courses has been for government agencies to take control of pre-service teacher education. In the United Kingdom, for example, the Teacher Training Agency (TTA), established in 1994 has the power to purchase pre-service teacher training places and therefore to allocate training places to universities, schools and other providers. Pre-service teachers in England and Wales now spend between 50 and 75 per cent of their time working in schools, and funding has been transferred from higher education institutions for this purpose. In the USA, where teacher quality varies considerably between states and jurisdictions, the Teach for America Program is one high profile

alternative entry route into teaching, requiring only five weeks of preparation at a residential summer training institute. However, entry to the program is highly competitive and has an acceptance rate of around 15 per cent of those who apply (Parliament of Victoria 2005: 83).

In the UK, the “quality” of teachers, as measured by inspection data collected by OfSTED, has improved over the five years 1999 to 2004. The proportion of trainees graded A (very good) and B (good) by OfSTED increased from 69.9 per cent in 1999/00 to 80.9 per cent in 2003/04. The OfSTED inspectors assess the quality of teaching based on observations of the teacher giving a lesson in the classroom and there has been a marked improvement in the proportion of lessons judged “satisfactory” or higher since 1991. Teacher training graduates report higher levels of satisfaction with their training, which is attributed to the increased amount of time spent in schools. The reforms have not resolved the difficulties of attracting students to teaching as a profession, with shortfalls in the number of recruits to teach the subjects of science, mathematics, design and technology (Furlong 2000, Tabberer 2003).

On the other hand, many aspects of the UK experience of transferring much of teacher training to schools may be problematic in the longer term:

- As the partnerships are voluntary on the part of schools – and compulsory on the part of higher education institutions – many schools are unwilling to act as full partners, so the system’s future is insecure.
- Funding is insufficient for such a highly devolved system, and the proportion of university staff on casual contracts has increased.
- The quality and scope of training offered between schools is variable.
- Over-regulation by the centre is undermining experimentation, innovation and flexibility.

(Furlong 2000)

A further problem with the UK experiment is that it appears to be having a negative impact on the recruitment of new teachers. Any expectations that the UK reforms might increase the professionalism of teachers have not been realised. The centralised and bureaucratic management of the system, with its emphasis on judging the quality of “practical” outcomes, may undermine the development of values and attitudes characteristic of a profession. Furlong questions the extent to which the present system, with its emphasis on “training”, encourages qualities in trainees such as:

- taking personal and collective responsibility for improving their skills and subject knowledge;
- seeking to base decisions on evidence of what works in schools locally and nationally;
- anticipating change and promoting innovation; or
- developing their own rationally based ‘practical theories’ of teaching.

Furlong also points out that – important though schools are as sites of learning – they are not well-equipped to be major sites of professional learning. He notes that many established teachers (and schools) are reluctant to take on initial teacher education and training as their primary responsibility. They are not convinced that such a role is vital for their professional development, nor do they want to divert their energies from their primary role as class teachers (Furlong 2000).

The way forward, Furlong argues, is for higher education institutions to fully embrace their role as educators of professionals, balancing the interests of both the university and the professional constituencies that they serve. Like the faculties of law and medicine, education faculties must be able to provide leadership to their profession in terms of providing the basis for lifelong learning and renewal, whilst avoiding a retreat into academic pursuits that are remote from the daily practice of schools.

He quotes Jaroslav Pelikan, an American historian, on the role of professional education in the university,

When they are performing at their full potential, the professional schools of the university (that is, departments and schools of education, law, medicine and so on) are positioned in a delicate balance between the university and the society, and specifically between the university and the professional constituencies for which the professional schools are responsible. The university protects them from becoming the vassals for the constituency or shaping their courses to what the constituency believes at any particular moment to be needed for a true professional in the field, which may be, and usually is, significantly different from what such a professional will need some years down the line. But the constituency, in turn, protects them from becoming mere satellites of the graduate school of arts and sciences. . . That delicate balance puts the professional schools into their leadership position in the lifelong education that is reshaping the mission of the university as a whole (Jaroslav Pelikan, 1992, quoted in Furlong 2000: 33).

The concept of professional education may be a useful framework for considering the reform of teacher preparation courses. It suggests that the role of teacher education faculties is to provide expertise in teaching and learning, grounded in teaching experience and professional practice. Through this expertise, they provide a bridge between the discipline studies that pre-service teachers must undertake – the traditional domain of universities – and the practice of teaching and learning in schools. More importantly, the concept of professional education implies that practitioners, such as high performing teachers in schools, should be members of the academy of learning in universities, while maintaining their professional role. This will be a challenge for many universities, given the renewed emphasis in recent years on the academic output of teaching staff at universities – possibly at the expense of their teaching expertise and professional practice. Yet staff with professional expertise “are central to professional education; it is they who are the experts in practical theory, it is they who provide the bridge between practice and other forms of knowledge” (Furlong 2000: 36).

The issue of how to build authentic partnerships in professional education is discussed in Chapter 2 of this report.

Resource constraints in teacher preparation

The 1998 Senate Inquiry into the Status of Teaching, reported that several witnesses complained about a decline in funding for teacher preparation courses within universities, but there is no published analysis of the resources available to teacher education faculties in Australia over the past two decades. The terms of reference of the current House of Representatives Inquiry into Teacher Education include an examination of “the adequacy of the funding of teacher training courses by university administrations” (House of Representatives 2005. No.11). Nevertheless, several indicators suggest a decline in the resources available for teacher preparation.

All Australian universities have suffered resource constraints over the past decade, and are now required to teach more students with fewer staff than ten years ago. The Review of Teacher Education in New South Wales presents research on the funding of teacher education in universities in that state between 1994 and 1998, illustrating a ten percentage point decline in the number of full-time equivalent (FTE) academic staff and a 12 percent increase in students/staff ratios over the four-year period (Ramsey 2000, Chapter 9).

The total budget for one teacher education faculty in an Australian university between 1992 and 1999 was published in a report on science education in 2001. The base grant to the teacher education faculty, expressed in constant prices, decreased by 40 per cent between 1992 and 1999 – an average decrease of six per cent per annum. Student numbers (EFSTU) declined by 10 per cent. The number of full-time staff declined by 53 per cent over the seven years, while the number of casual staff employed (FTE) increased by six per cent. The report comments on the impact of these changes on the quality of provision by noting that in 1990, first year primary education students participated in 21-24 hours of instruction time per week compared to 12 hours in 1999 (Goodrum, Hackling and Rennie 2001: Table 2.14).

There are suggestions that teacher education provision could be more efficient, in terms of reducing the number of institutions that provide it, and improving wastage rates from teacher preparation courses.

The NSW review argues for a reduction in the number of teacher preparation course providers, on the grounds that it is inefficient for a large number of institutions to try to cover the field. The report points out that fragmentation results from the division of teacher education across early childhood; primary; secondary and adult education; six primary and eight secondary key learning areas; and both undergraduate and postgraduate provision. The report suggests that teacher education should be concentrated in the institutions that are prepared to give it a high priority, or that a group of institutions should work together to provide a comprehensive range of offerings at the graduate and postgraduate level (Ramsey 2000: 171).

The DEST review of Teaching and Teacher Education noted that in 2001, there were 38 institutions that provided teacher preparation courses through 310 listed teacher preparation courses, but that one-third of programs (136) had no completions for 2001, and 114 had had no completions for the past three years. Therefore there were only 296 “active” teacher education programs or 263 with completions in 2001. The average number of graduates per course was 52, and 44 courses had 100 or more completions in 2001 (Dow 2003: Vol. 3: 42).

Less than two-thirds of teacher education graduates (about 60 per cent) are working full-time in education in April of the year following the completion of their course (Dow 2003, Vol. 3: Table 21). This represents a wastage rate of between 30-40 per cent. But losses of prospective teachers occur at every point along the pathway to becoming a teacher. The DEST review reported a 2002 study for the Victorian Institute of Teachers which found that, for every 100 applicants for a place in a teacher preparation course, 56 received an offer, 41 enrolled, 31 would be expected to graduate, 23 would be available for full-time employment, and 15 would ultimately be employed as teachers in schools (Dow 2003, Vol 1: 34).

The research suggests that a major resource constraint on teacher preparation courses in Australia is the cost of the practicum component. Although participation in work places has the overwhelming support of both teacher educators and student

teachers, the cost of such placements inhibits the extent to which they can be provided in teacher preparation courses. The arrangements for practicum placements vary between institutions, but the average length is 40-60 days for a four-year undergraduate course. The cost of organising the practicum represents at least six per cent of a teacher education budget, assuming that the faculty receives the full amount allocated under the relative funding model (which most don't). More than 60 per cent of the cost of the practicum is spent on the payment of teachers for on-site supervision, 25 per cent is spent on organising placements, and 15 per cent on academic supervision of practicing teachers (Ramsey 2000, Chapter 9.5).

A Scottish study on the costs of partnership in initial teacher education found that academic supervision was the main cost component (48%) and the organisation of placements absorbed 26 per cent of the total cost. There is no payment to supervising teachers in Scotland and schools appear to bear the cost of teacher supervision, even though they are not funded for it. The teachers' industrial agreement includes, as one of the duties of teachers "to contribute to the professional development of colleagues, including probationary and student teachers". Nevertheless, only 62 per cent schools in Scotland participate in taking teacher placements, each of which involves between 25 and 47 hours of staff time (Deloitte and Touche 1999).

In its survey of work placements in other professions, like nursing, dentistry, medicine, social work and law, the New South Wales review found that no other profession made significant payments to professionals offering workplace supervision. Under the Teaching Hospital Model, for example, teaching hospitals have joint academic and hospital appointments including clinical academics, professors, lecturers and clinical educators and many staff, both permanent and visiting, are expected to teach. In dentistry, professionals who contribute to supervision of work placements are given a range of honorary academic titles (eg. honorary associates, clinical associates, clinical professor, adjunct clinical professor) in recognition of their role (Ramsey 2000: 110–112, Table A4.12).

Although the research literature suggests that professional experience should be at the core of teacher preparation courses, it appears that the high cost of providing practical experience for pre-service teachers constrains much of what universities and schools might do in this regard. It was suggested to the New South Wales review that the cost of delivering the practicum had contributed to the weakening of links between universities and schools (Ramsey 2000: 242).

On the other hand, the report of the Victorian Parliamentary Inquiry into pre-service teacher training suggests that the issue of the cost of the practicum in teacher education is over-stated. The Committee observed that some education faculties find "innovative ways to utilise their resources to prioritise professional experience (whereas) other faculties have not put the same amount of energy into this cause". The Committee also pointed out that cost does not appear to be a barrier to effective professional experience programs and that schools can be encouraged to participate more, without additional resources. They point out that universities can offer benefits to schools from participating in teaching practice programs, such as "access to university facilities, opportunities for professional development and involvement of university staff in curriculum or administrative activities within schools" (Parliament of Victoria 2005: 151–159).

In summary, any new models of professional experience – such as those discussed in Chapter 2 of this report – will have to address the issue of cost, otherwise the prospects of implementing reform in this area will be severely constrained. Ways to reduce costs could include:

- rationalising the number of institutions offering teacher education;
- reducing the high cost of professional experience through partnerships with schools and education authorities that share the cost; and
- reducing the wastage rates from teacher preparation courses (ie. through more careful selection, early exposure to schools, and the provision of exit points to other courses).

Characteristics of teacher education students

Teacher education students appear different from the general university population in a number of ways. Eighty-three per cent of teacher education students are female, compared to 56 per cent of all students at university. The femaleness of the teacher education enrolments has increased since 1988, when only 77 per cent of teacher education students were female (Dow 2003, Vol 3:39).

The recent Commonwealth Review of Teacher Education commissioned an analysis of the characteristics of teacher education students using data from the Longitudinal Survey of Australian Youth (LSAY). The analysis is based on almost 3,000 young people who were born around 1990, and who had participated in university study by 2001. The analysis compared the characteristics of those in initial teacher preparation courses (primarily undergraduate courses) with those who had participated in other fields of education at university. The research found that teacher education students in undergraduate courses up to 2001 were generally less academically able than the majority of university students. In terms of school achievement in reading and mathematics in Year 9, students in initial teacher preparation courses were less likely than their peers in other courses to come from the highest achievement group (15 per cent compared to 27 per cent). Teacher education students were more likely to be drawn from the bottom half of the achievement distribution (36 per cent compared to 26 per cent for students in other university courses). Teacher education students were more likely to be “first generation” tertiary students, than students in other courses. Only 28 per cent of teacher education students’ parents had completed higher education, compared to 36 per cent of students in other courses. Forty-three per cent of initial teacher education students came from families where their parents have not completed secondary school, compared to 31 per cent of students in other courses. Teacher education students were also more likely to come from non-metropolitan regions than other students (66 per cent compared to 48 per cent of students in other courses) (Dow 2003, Vol 3: Table 14)¹.

One limitation of the analysis based on the LSAY data reported in the DEST review is that the sample does not include students who participate in postgraduate teacher preparation courses (ie. the Diploma of Education or Masters of Teaching Programs that follow an initial degree). Graduate programs account for 40 per cent of

¹ The LSAY analysis does not report the impact – if any – of the above characteristics on the subsequent graduation rates of teacher education students. Nor do we know the extent to which students with different background characteristics enter professional teachers.

completions in teacher preparation courses overall, and 63 per cent of completions in secondary teacher education (Dow 2003, Vol 3: 44). As the LSAY analysis focused on the characteristics of students who had undertaken undergraduate courses, the findings do not apply to the large proportion of teacher education graduates in postgraduate programs.

A further limitation of the LSAY analysis is that the data are five years old; therefore the findings may not reflect the characteristics of the contemporary cohort of teacher education students. There is some evidence to suggest that tertiary entrance scores for undergraduate teacher education have risen since the late 1990s and that entry to teacher preparation courses is now more competitive. In the annual study of unmet demand for university courses released by the Australian Vice-Chancellors' Committee in 2005, the field of education was ranked sixth among 17 fields of study in terms of the proportion of eligible applicants² who received an offer of a place. With 74 per cent of eligible applicants receiving an offer of a place, unmet demand for teacher education was lower than veterinary studies (25 per cent), medicine (28 per cent), dentistry (45 per cent), law (64 per cent), and architecture (69 per cent), but was higher than unmet demand for all other fields including health, nursing, management/commerce, arts, engineering, information technology and science (AV-CC 2005: 2). The ongoing review of the characteristics of people entering teaching is a matter that should be explored further.

Employment prospects for teacher education graduates have also improved markedly. The DEST review reported that less than two-thirds of teacher education graduates (about 60 per cent) in 2000 were working full-time in education in April 2001 – the year following the completion of their course (Dow 2003, Vol.3: Table 21). In comparison, the latest data from the Graduate Destination Survey indicates that 91 per cent of 2004 graduates with a Bachelor of Education under 25 years of age were employed full time as teachers by April 2005. In their first year of employment as graduates, professional teachers were paid a median salary of \$40,000 per year – 86 per cent of average weekly earnings (Graduate Careers Council of Australia 2005).

The Victorian Inquiry into pre-service teacher training argued that while academic standards are important, prospective teacher education students should also possess personal characteristics that can only be assessed through interviews. The Committee acknowledged that there was inadequate research on the extent to which poor selection decisions contributed to drop out rates, unsatisfactory academic results, unsatisfactory performance in the practicum, lack of participation by pre-service teachers in activities working with children, and low employment rates among graduates. The Committee commissioned focus group research into students' motives for becoming teachers. This research suggested that most primary school teachers had strong personal motives to work with children, whereas the motives of students in post graduate secondary teaching programs were more mixed (ie. they saw teaching as a "fall-back" career, or didn't know what else to do). The Committee also suggested that many committed mature-age applicants could be denied entry to teacher preparation courses due to the use of academic criteria for selection. It recommended that selection criteria for teacher preparation courses should involve assessments of both academic achievement and aptitude for teaching, usually involving an interview process (Parliament of Victoria 2005, Chapter 7).

² "Eligible applicants" are applicants who have gained an Interstate Transfer Index (ITI) of 53.00 or better in 2004.

On the other hand, we found no research that identified the characteristics of a successful teacher education student that could be determined through an interview. There is no evidence-based list of personal attributes associated with successful course completion, retention in teaching jobs and effective teaching. In the absence of such a list, it could be inefficient and expensive to undertake mass interviews of prospective teacher education students. There is some evidence that experience working in schools is a decisive factor in confirming one's commitment to teaching or in realising that this is the wrong career. If this is the case, then such evidence should be taken into account in the application process. But such evidence could be considered by the assessment of written applications and references, rather than an interview process.

The inquiries chaired by Dr Gregor Ramsey and Professor Kwong Lee Dow both noted that pre-service teachers need substantial and high quality experience in schools, and that the earlier the experience comes, the better. Early experience in schools gives students an opportunity to 'reality check' their aspirations and to exit to other courses before it is too late. The New South Wales review suggested that initial teacher education programs should be structured to:

- provide easy exit for students to another program with full-credit for the work done; and
- offer professional experiences that provide "ample and varied opportunities" for student teachers to 'test' their suitability for teaching (Ramsey 2000: 43).

Sutherland and her colleagues at Sydney University reported a strong sense of commitment and enthusiasm among pre-service teachers for engaging in the practicum, but both the University of Sydney study and the Monash study by Brenton Doecke involved self-nominated student teachers. The students who volunteered to participate were "arguably the most committed and reflective of their respective cohorts, as is shown by their preparedness to meet together in addition to their usual workshops and lectures" (Doecke 2004: 207). It is possible that the commitment and level of reflection demonstrated by the pre-service teachers in these studies are not typical of the entire population of pre-service teachers. We cannot generalise about all students' attitudes to the practicum based on these studies.

Concerns about the capacities of teacher education students, particularly in literacy and numeracy, have been addressed in the USA by the introduction of certification requirements prior to employment. State licensing standards in the USA – which appear to influence the quality of teaching and learning in schools – include basic skills tests, and require a specified period of practice teaching, completion of subject majors in the disciplines that will be taught by the teacher and specifications regarding course content (Darling-Hammond 2000: 46).

In summary, we found no substantive research studies on the desirable characteristics of students who are to become teachers. Such research might assist in the more effective selection of students and could reduce the wastage rates from teacher preparation courses.

2. Effective links between teacher education programs and schools

There is widespread acknowledgement in the policy literature of Linda Darling-Hammond's (2000) analysis of the factors influencing the quality of teaching, which found that pre-service teachers' knowledge of their subject through content studies *coupled with* skills in teaching, were the ingredients of effective teaching and learning in schools. This chapter focuses on how to improve pre-service teachers' skills in teaching and learning, through establishing more effective links between teacher education programs and schools. It is important to acknowledge that we are not advocating the de-professionalisation of teaching through making teacher education a form of work-based training. The role of universities in teacher preparation is critical, both for delivering content-based academic studies and for providing the professional education needed to develop skills in teaching.

Effective links between teacher education programs and schools appear increasingly critical for developing and maintaining the professionalism of teachers. A major criticism of teacher preparation courses focuses on the extent to which student teachers are equipped to manage classes of students. The generally weak relationships between universities and schools appear to disadvantage many stakeholders, such as teacher education graduates, who complain about the lack of practical experience in their courses, and school principals who complain that new teachers are not "school-ready" (Parliament of Victoria 2005: Chaps. 2 & 5).

But the research literature takes the idea of practical experience further than simply the notion of having teacher education students "spend more time in schools". It emphasises the need for student teachers to reflect constructively on their teaching practice, to share their experiences with colleagues and to make links between the theory and the practice of teaching. These processes are seen as essential for effective, lifelong professional learning. The concept of professional education – as proposed by Furlong – suggests that universities must maintain a balance between the theoretical aspects of teaching and learning (pedagogy) and insights from practical experience.

Purpose of professional experience

There is no definitive statement in the literature about what constitutes successful professional learning – but this is not a problem exclusive to teacher education. Researchers generally acknowledge that we know very little about the pedagogy of how pre-service students learn to be good teachers. The Victorian Committee of Inquiry reported that it was "continually frustrated . . . by the lack of research regarding what form of teacher education is the most effective, as measured through performance in the early years of a teaching career" (Parliament of Victoria 2005: 62). More fundamentally, Graham Nuthall has pointed out that we don't know much about how students learn, nor how teachers influence student learning, even though such knowledge is critical to effective teacher education (Nuthall 2004, Tigchelaar and Korthagen 2004,).

All we do know is that subject content studies *coupled with* skills in teaching should be the primary focus of teacher preparation courses (Darling-Hammond 2000). Assuming that skills in teaching are the product of good professional learning,

universities should strive to provide an effective link between current theories about teaching and student learning (ie. pedagogy) and the practical experience of the classroom. A major theme in teacher education research is the need to link the *theory* of teaching with the *practice* of teaching in schools. Conversely, researchers also argue that the *practice* of teaching should influence the development of new *theories* of teaching and learning. Thus the *theory-practice* or *practice-theory* continuum is seen as central to effective professional education.

Since teacher preparation courses became embedded in the academic context of universities, teacher educators have been accused of becoming more removed from the practice of teaching in schools. This assumption is cited as one reason why graduates from teacher preparation courses are not well-equipped with the knowledge and skills required for modern classrooms. In other words, it is alleged that the current links between theory and practice in many teacher preparation courses are weak. The Victorian Inquiry into pre-service teacher training argued that lack of experience in the classroom meant that pre-service teacher preparation courses “are too heavily based on theory and do not prepare new teachers for some of the practical challenges of working in the classroom and school community” (Parliament of Victoria 2005: 105).

On the other hand, it is not consistent with the concept of professional education that a student teacher’s professional learning should be devoid of theory altogether. All studies reviewed assume that that professional experience must be more than simply “practising in the classroom”. Practicum experiences are inadequate if they simply result in pre-service teachers developing the technical skills of classroom management and effective instruction. Rather the practicum should help pre-service teachers develop the “practical wisdom associated with professional practice” (Field and Latta 2001).

Shulman argues that becoming a professional involves “acquiring a deep understanding of complex practice, of ethical conduct and higher-order learning which occurs in schools and classrooms”. Louise Sutherland and her colleagues describe “professional knowledge” as the successful integration of theoretical knowledge about the situational, emotional, cognitive, physical, cultural and organisational factors that interact and impact on students’ learning with classroom practice. They say that in order to develop professional knowledge, pre-service teachers need “opportunities to be involved in professional practice, and to reflect on and integrate the knowledge they have gained from their experiences with the theoretical knowledge provided by the institution” (Shulman 1998: 515, Sutherland, Scanlon and Sperring 2005: 80).

Professional experience therefore involves more than simply experiencing the norms of a typical classroom. It involves engaging with student learning, drawing on theoretical knowledge about teaching and learning, and reflecting on how theory can inform future classroom practice. Teacher preparation courses that are predominantly practice-based are widely criticised in the literature. It is argued that teaching experiences alone can lead to unproductive processes of socialisation rather than fruitful professional learning. Entirely practice-based programs may simply induct student teachers into the “tricks of the trade” and give them minimal encouragement or opportunity to reflect on the links between theory and practice. The capacity to reflect upon and learn from their teaching experiences is considered fundamental to the development of a professional teacher (Cole 1997, Tigchelaar and Korthagen 2004, Widdeen et al 1998).

In Australia, teacher preparation courses tend to be criticised for focusing too heavily on theory without making effective links to practice. The Victorian Inquiry into pre-service teacher training argued that teacher preparation courses should:

- emphasise the practical dimensions of teaching (ie. in the sense of how theory informs practice);
- integrate practical experience into the structure and content of teacher preparation courses; and
- model effective teaching practices during teacher education (Parliament of Victoria 2005: 105).

The Victorian Inquiry argued that links between theory and practice would be stronger if universities employed instructional techniques such as problem-based learning and applied research projects undertaken in schools. There is also recognition that effective professional learning occurs when student teachers are able to draw on their own experiences as case studies for reflection and further action (Parliament of Victoria 2005, Tigchelaar and Korthagen 2004).

The New South Wales Review of Teacher Education suggested that there was a dichotomy between theory and practice in teacher education caused by a lack of effective links between teacher education programs and schools. The report commented, “models of teacher education are needed in which accredited practising teachers are able to exercise responsibility for the professional growth of aspiring and new teachers”, and suggested that “universities, in co-operation with employers of teachers and the profession, develop models of initial teacher education which place professional experience at their core and require joint planning, delivery and reporting” (Ramsey 2000: 38-39).

In summary, there is little substantive research about the pedagogy of preparing teachers – how pre-service teachers learn to be good teachers. Nevertheless, pre-service teachers appear to endorse the view that spending more time in schools engaged in a range of professional experiences improves their professional learning and makes them more “school ready”. On the other hand, solely school-based teacher preparation carries the risk of becoming an unproductive means of socialisation rather than the basis on lifelong professional learning. Professional experience must involve more than simply experiencing the norms of a typical classroom. It should encourage pre-service teachers to reflect on their experiences and to integrate their practical knowledge with theoretical insights about teaching and learning.

Varieties of professional experience

Traditionally, the practicum involves a period of several weeks when a student is placed in a school under the supervision of a practicing teacher and is given full responsibility for the delivery of education during that time. The practicum is usually treated as a unit of study and the student’s performance is assessed (primarily by the supervising teacher). Typically, a pre-service teacher has 40 to 60 days of practicum experience, depending on the nature of the course and the institution. Nevertheless, the Victorian Inquiry gives examples of innovative practice where teacher education students may receive between 130-150 days of professional experience in schools (Ramsey 2000: 106, Parliament of Victoria 2005, Chapter 5).

New models of professional experience, some of which are developed in Australia, offer teacher education students a much wider range of school-based learning experiences than the traditional practicum model. This is consistent with Gregor Ramsey's argument that "all student teachers should have substantial opportunities to work collaboratively with advanced practitioners rather than in a model which only provides opportunity for individual classroom teaching, albeit supervised" (Ramsey 2000: 57). Within a school-university partnership model, a student teacher may be engaged with teaching practice on three broad levels of intensity:

- shadowing professional teachers in school, where the teacher education student simply observes a teacher in practice and reflects upon their observations;
- legitimate peripheral participation activities, where the teacher education student is given responsibility for organising a learning activity, such as guiding a science experiment, or participating in an excursion; or
- Practice Teaching, where the teacher education student is responsible for a class or lesson (ie. the traditional practicum).

All three levels of engagement appear to contribute to the professional learning of pre-service teachers. The criticism of teacher education programs reported by the Victorian Committee of Inquiry tended to be where one type of activity dominated at the expense of another, such as programs in which pre-service teachers did nothing more than "observe" classroom practice for the first three years of their course. Similarly, programs that offered nothing more than the traditional practicum for 4-6 weeks were criticised by pre-service teachers as too narrow (Parliament of Victoria 2005: Chap. 5).

Shadowing practicing teachers

From the limited studies available, many student teachers appear to respond positively to opportunities for school-based professional experience at all stages of their course. From his study of pre-service teachers and their practicum experience, Brenton Doecke of Monash University concluded that student teachers were attentive "teacher watchers", and enjoyed shadowing teachers, using methods of systematic inquiry to make sense of what they observed in the classroom. He points out that pre-service teachers bring their own knowledge and expectations to the practicum and should be actively engaged in critiques of their own and other teachers' professional practice:

Student teachers are not passively inducted into the profession, with change enacted upon them, the subjects of a discourse over which they have no controls, They actively participate in their own making, consciously applying various frames of reference in order to make sense of their experience and arrive at judgements about professional practice (Doecke 2004: 208).

Legitimate peripheral participation

Lave and Wenger's (1991) concept of "legitimate peripheral participation" can be used to describe learning activities that pre-service teachers might engage in to develop professional knowledge early in their training. Louise Sutherland and her colleagues (2005) describe a model developed by the University of Sydney and the NSW Department that enabled pre-service teachers to participate in the "community of practice" in schools and to reflect on their work in a way that enhanced their professional learning (ie. linking theory with practice).

In 2001, the New South Wales Department of Education and Training formed a partnership with the Faculty of Education at the University of Sydney that resulted in the co-funding of two lectureships in education at the university. The appointees were expected to work at both the university and a senior high school in a newly formed district. One of the goals of the partnership was to develop “legitimate peripheral participation activities” for pre-service teachers at local schools. These activities included:

- school-based tutorials involving both pre-service and practicing teachers;
- the opportunity to shadow a teacher in a school for one day each semester;
- interviewing small groups of primary school pupils (about science concepts);
- leading a small group of primary school pupils in a structured investigation in the classroom;
- acting as facilitator for an outdoor, hands-on science excursion; and
- planning a unit of work for a secondary chemistry syllabus (in consultation with a practicing teacher), observe a class conducted by the teacher, and have follow-up consultations with the teacher about the relationships between the syllabus, teacher planning, students’ aptitudes and the lesson taught.

As the students’ participation was not obligatory, we cannot generalise from the findings. Nevertheless feed back from participating students suggested that the experiences enabled them to link their theoretical studies with school practice and that their involvement with practicing teachers initiated students into communities of practice within schools.

The Project Partnerships developed by Victoria University also provide pre-service teachers with legitimate peripheral participation activities throughout their training. In 2004, Victoria University had over 250 Project Partnerships in approximately 200 primary and secondary schools as well as other educational settings with young people, such as the Museum. The projects are developed in response to requests from schools and learning providers and involve a pre-service teacher working on a specific learning initiative for which they gain credit in their university studies. Examples of projects include early years literacy programs, lunchtime activity programs, developing web-pages with Year 9 students, and developing, trialling, teaching and evaluating units of work at the Melbourne Museum. Students become involved in Project Partnerships half-way through their first semester of study and remain engaged throughout their course. As a result, pre-service teachers are in schools for around 130-150 days in total, even though the university only pays its partner schools for the mandated 80 days (Parliament of Victoria 2005: 154-155).

Louise Sutherland and her colleagues suggest that the success of “legitimate peripheral participation activities” as a tool for professional learning depends on four criteria:

1. The activity must be authentic (recognised and valued in educational terms).
2. The responsibilities of pre-service teachers must be clearly limited.
3. The activity must provide opportunities to translate theoretical knowledge into professional practice (ie. support the students’ formal learning).
4. The activity should have minimal impact on practicing teacher’s principal responsibilities (particularly when the teachers are not paid for their contribution).

Supervised professional practice

Assuming that students are provided with a range of professional experience opportunities, there is strong support for the concept of a sustained period of supervised professional practice (traditionally, “the practicum”) during their final year. But the current conditions of supervised professional practice have attracted a great deal of criticism. The three main issues are: 1) the selection of schools for student placement; 2) the level and quality of involvement by university academics; and 3) the expectations, responsibilities and selection of school-based supervisors.

Schools both reflect and reproduce social and economic inequalities within Australian society. A hierarchical curriculum and the social segregation of schools provides ample opportunities for the exploitation of cultural capital in the reproduction of structural inequality (Teese and Polesel 2003). The stratification of schools and students means that the practicum experiences of pre-service teachers can be very different, depending on the schools and students with whom they are placed.

There is some acknowledgement in the teacher education literature that inequalities in school systems contribute to student teachers’ experience of the practicum and influences their opportunities for professional learning. Doecke (2004) describes his students’ practicum experiences in two very different settings – a disadvantaged high school where his student teacher “has nearly given up on her students, though not without a struggle” and a prestigious private girls school where the students “are very comfortable transcribing information of the kind (the student teacher) is giving them” (Doecke 2004: 211-212). He points out that both practicum experiences offer limited opportunities for professional learning.

Doecke also argues that the knowledge provided in teacher preparation courses – with its focus on developmental scales and ‘typical’ progression – is inadequate to prepare students for the environment in which they are operating.

... my advice to these student teachers does nothing to enable them to focus on the conditions that shape their professional practice in these schools or the social and economic policies that have produced such inequalities. . . Instead, I persist with a language that supposedly applies to all circumstances, as though it is possible to chart their own professional ‘growth’ regardless of the actual conditions for professional learning with which they are confronted during their teaching rounds (Doecke 2004: 213).

Doecke argues that teacher preparation cannot be devoid of ideas and values that help student teachers to understand the context within which they work. He suggests that teacher education should nurture and respond to the idealism of many pre-service teachers to enable them to embrace “the possibility of critique and reform” (Doecke 2004: 211).

The nature of supervision in the practicum – from both university academics and school-based supervisors – makes a considerable difference to what students obtain from the experience. The Victorian Committee of Inquiry cites overseas models where “only the most highly qualified teacher educators ... are permitted to undertake supervisory responsibility for the teaching practicum” (167). In contrast, in many Australian universities, resource constraints mean that the supervision of the practicum is the responsibility of casual academic staff. In other universities, the role is carried out by teaching academics who have little time to spend in the schools.

An alternative arrangement, pioneered by RMIT University is to appoint community co-ordinators to work with 25-30 pre-service teachers and their mentors during their placements. People in these positions are often retired teachers or principals, or leading teachers in schools on release from duties (Parliament of Victoria 2005: 156).

The literature suggests that pre-service teachers typically require high levels of mentoring or support during their practicum to reflect on the links between theory and practice in a way that will inform their teaching experience. It is argued that the supervising teachers in schools are not well-equipped to provide their mentoring and support role, partly due to time constraints and the limitations of their own skills (Gale and Jackson 1997, Parliament of Victoria 2005: 173).

The selection of school-based supervisors and the expectations and responsibilities placed on them differs between universities. School-based supervisors are usually chosen by Principals, but the Victorian Committee reported that many pre-service teachers considered their school-based supervisors to be under-prepared for the task. The Committee suggested that there were few mechanisms for ensuring that school-based supervisors are well-equipped for their role or for ensuring that poor supervisors are not re-appointed. In most practicum arrangements, school-based supervisors are responsible for assessing the student's performance against criteria provided by the university and awarding them a pass or fail. The Victorian Committee reported that many supervisors felt uncomfortable with this role, and were ill-prepared to perform it. Given the responsibilities attached to the role of school-based supervisor, the Victorian Committee of Inquiry recommended that the Victorian Institute of Teaching develop an accreditation framework for school-based pre-service teacher supervisors (Parliament of Victoria 2005: 171-174).

The Victorian Committee of Inquiry "consistently heard that current minimum requirements for teaching practicum are simply insufficient for providing pre-service teachers with the level of teaching practice required to develop skills for future independent, unsupervised teaching" (162). Although the Committee recommended an increase in the minimum requirements for a four year course from 80 days to 130 days in schools, it suggested that these days should be spent on a range of professional learning experiences, not simply the traditional practicum. The Committee endorsed moves toward the continuous placement of student teachers in schools, say for one day per week, often referred to as an "internship". The main benefits of such placements are that student teachers have time to develop on-going relationships with students, supervisory staff and mentors. On-going placements help pre-service teachers to understand the operational aspects of school life and thus facilitate transition into professional teaching. Student teachers may also find it easier to enter their full-time practicum if they are familiar with the school environment. The Committee of Inquiry also endorsed a model of pre-service teacher education whereby the final year of preparation was almost entirely school-based (Parliament of Victoria 2005: 162-166).

Although the Victorian Committee of Inquiry into pre-service teacher training identifies a number of innovative partnerships between Victorian institutions and schools, it says that they are not consistently applied and "many pre-service teachers in Victoria are still experiencing only the minimal amount of professional experience" (154-159).

In summary, new models of professional experience offer pre-service teachers opportunities to engage in teaching and learning in varying degrees of intensity, such as: shadowing professional teachers in a school; undertaking legitimate peripheral participation activities (ie. specific learning projects); and practice teaching (the traditional practicum). Student teachers also appear to appreciate the opportunity to work in schools for a sufficient length of time to build on-going relationships with teachers and students. The traditional practicum (a set period of supervised student teaching) is now considered insufficient for the effective professional education of student teachers, but should be offered in conjunction with varieties of professional learning.

Partnerships in professional education

There are some models of teacher education that attempt to “place professional experience at their core”, and the research evaluating these models provides insights into how this might be achieved. Many of the problems relating to the practicum, such as: 1) the selection of schools for student placement; 2) the level and quality of involvement by teacher education academics; and 3) the expectations, responsibilities and selection of school-based supervisors, could be resolved through stronger partnerships between universities and schools.

A pervasive theme in the literature is that *authentic* links between schools and universities (ie. where both parties collaborate and respect the other’s contribution) are essential for effective professional education. The research suggests that it is not easy to create authentic partnerships between schools and universities that result in good outcomes for professional education. In many university-school partnerships, the relative power of schools and universities is unequal and collaboration is minimal (Parliament of Victoria 2005, Chap. 5). Even in partnerships that provide students with a wide range of professional experiences, there can be minimal scope for knowledge about the practice of teaching to transform the academy.

A major report in the USA called *Tomorrow’s Schools of Education*, by the Holmes Group (1995) suggested that professional education in teacher education faculties would be renewed by the creation of clinical professors – people who were equally at home in universities and public school classrooms. The Holmes Group envisaged teacher education faculties as places where expert teachers were used in the education of other teachers. The Holmes Group envisaged that Clinical Professors would come from among “the ranks of distinguished (school) practitioners” to “form a living bridge between campus and practice”. While the clinical professors would remain tenured with the schools, they were expected to collaborate with university faculty and make “significant contributions to teaching and inquiry”.

The DEST Inquiry into Teaching chaired by Kwong Lee Dow also recommended that teacher educators should spend more time teaching in schools and that professional teachers should be given opportunities to become teacher educators. Specifically, the report said that teacher educators should have “continuing direct involvement in schools – including as part-time teachers, as mentors to beginning teachers, and as experts conducting or guiding action research”. It also said that “numbers of highly accomplished teachers and school leaders (should) be placed in education faculties as teacher educators for specified durations”. The report suggested that education

authorities should become more involved in teacher education through the conjoint appointment of such staff, and that “universities, schools and education authorities will need to collaborate to make this possible” (Dow 2003, Vol. 1: 36).

Over the past decade, some universities in the UK and the USA have experimented with the employment of clinical faculty – school practitioners employed by teacher education departments in universities (Cope and Stephen 2001). Experiments with clinical faculty in teacher education programs have produced some interesting evidence. Cornbleth and Ellsworth (1995) point out that as clinical faculty seek to find a place and to bridge two institutions, they often discover that they do not meet “the traditional expectations” of either. Academic faculty, in particular, can be unwelcoming and resistant to the “clinicalisation” of teacher education, and thus seek to ensure that boundaries are not blurred (Bullough Jr., Hobbs, Kauchak, Crow and Stokes 1997).

Robert Bullough Jr. and his colleagues point out that even when extensive university-school partnerships are put in place, it does not ensure that the parties truly collaborate, or transform one another through communities of practice. They quote Furlong et al (1996) who point out that partnerships can also be hierarchical and separatist. For example, partnerships that are dominated by the higher education institution tend to be hierarchical or top-down, where the schools are simply used as resources for setting up student learning opportunities. Separatist partnerships involve “separate and complementary responsibilities” for teacher education but lack any “systematic attempt to bring these two dimensions into dialogue”. Such partnerships might involve the employment of clinical faculty by teacher education institutions, but restrict their role to the organisation and supervision of pre-service teachers when they are in schools.

An evaluation of a trial with Clinical Faculty Associates (CFAs) at Brigham Young University (BYU) in Utah found that the partnership arrangements were both hierarchical and separatist. Clinical Faculty Associates, appointed on the basis of their superior performance as teachers were employed by the university for two years and their major role was to supervise and mentor pre-service teachers in schools. Many enrolled in postgraduate courses at the same time. Although clinical faculty associates were generally happy with their role, the evaluation concluded that they operated within a “transmissive” model of education. The relationship with the academics was hierarchical in that CFAs were well-briefed in the faculty’s expectations of the students’ professional experience but were given few opportunities to contribute to the teacher education program. “Generally speaking, the CFAs have understood themselves not as professionals who generate knowledge, but rather as bearers of others’ knowledge whose task it is to carry this knowledge intact from the university to the school.” The CFAs interacted primarily with other CFAs and their interactions with university academics were simply cordial. They “shared a view of their role consistent with that held by the majority of the university-based teacher educators, a perception embedded in an expert-driven epistemology and hard-set status system” (Bullough Jr, Draper, Smith and Birrell 2004: 508; 512).

In Australia, some universities are developing more extended partnerships with schools. Louise Sutherland and her colleagues describe a model developed by the University of Sydney in partnership with a senior high school, co-funded by the university and the NSW Department of Education and Training. But they identify several limitations to the success of their partnership at the University of Sydney: the

secondary school was not geographically close (some 45 minutes from the University); neither the schools nor practicing teachers were paid for their participation; and pre-service teachers participated in the activities on a voluntary basis in addition to course work (Sutherland et al. 2004: 81-82).

RMIT University, for example, places all its pre-service teachers within one of 17 Professional Practice Communities, each of which involves a number of schools, early childhood and adult education providers. The community co-ordinators appointed by RMIT are responsible for 25-30 pre-service teachers in each Community, as well as having a liaison and professional development role with on-site supervisors and mentors. The university (through the community co-ordinators) convenes conferences for the supervisors, offers mentoring workshops, and gives credit for supervising professional practice towards a Masters degree. University supervisors, in turn, support the community co-ordinators, convene meetings for each Professional Practice Community, visit schools when requested, and meet each semester with pre-service teachers and their school-based supervisors in a formal context (Parliament of Victoria 2005: 156).

In summary, many of the criticisms of the current arrangements for the supervision of the practicum could be addressed through stronger partnerships between universities and schools. But the research suggests that there are few *authentic* partnerships in professional teacher education. The traditional tension between theory and practice in teacher education is more likely to result in partnerships that are hierarchical (where universities control the content and purpose of professional experiences) and separatist (where school practitioners are given responsibility for managing only the practical aspects of professional learning). Such partnerships stifle opportunities for professional collaboration between practicing teachers and teacher education academics, thus limiting the prospects for building new professional knowledge.

Towards authentic partnerships

Generally speaking, teachers think that time spent in schools is the most important aspect of teacher preparation, whereas academics place a higher priority on time spent in universities. This fundamental difference in values “presents a serious challenge to the effort to form university/school partnerships” (Bullough Jr. et al. 2004: 510). Some research acknowledges that there is a tension between the academic and the practical in teacher preparation courses, and that academic stakeholders have a stronger power base in universities than do professional stakeholders. The research suggests that many university-school partnerships are less than effective because the tension between the academic and the professional is not managed well. In most partnerships reviewed, academics retain tight control over the content of teacher preparation courses, and the contribution of school practitioners is neither acknowledged nor encouraged. Robert Bullough and his colleagues argue that such unequal arrangements do not enable the full potential of university/school partnerships to be realised. They suggest that university/school partnerships should be more than simply a mechanism for broadening student teacher’s practical experience in the classroom. A truly collaborative partnership has the potential to transform teacher preparation itself. An authentic partnership between a university and a school would be one where both partners invest in the relationship with each other, and commit to building new and shared communities based around the interaction of theory and practice.

From their evaluation of the experience of Clinical Faculty Associates at Brigham Young, Bullough and his colleagues (2004) argue that school-university partnerships must extend beyond the hierarchical and separatist models if they are to provide the basis for effective professional learning. Drawing on Wenger's (1998) notion of a community of practice, Bullough et al. suggest that effective partnerships must be built around shared practices, through which the partners are able to negotiate diverging meaning and perspectives. "... university-based teacher educators and representatives from the schools, like CFAs, must encounter one another in consistent, sustained and valued interaction *and shared work*, and the agenda for interaction must not be set by only one side or the other. When this happens, collaborative university/school partnerships may emerge" (Bullough Jr et al. 2004: 513).

From the research literature, it is difficult to evaluate the authenticity of Australian partnerships in teacher education, in the terms of the collaborative ideal held by Robert Bullough Jr and his colleagues. All of the models discussed above extend student teachers' professional learning in schools, and there is some evidence to suggest that professional teachers and teacher education academics are forming new communities of practice. But in all models, the engagement of professional teachers by the universities is limited and academics appear to have little practical engagement with schools or professional teachers. Sutherland and her colleagues conclude, "in order to have credibility with the profession, and develop authentic experiences for their students, the academic staff needs to maintain on-going experiences with schools, classrooms and practicing teachers. This suggests that teacher education faculties need to develop mechanisms for academic staff to move easily between academic and professional experiences" (Sutherland et al 2005: 91).

The Review of Teacher Education in New South Wales highlighted the structural barriers to improving the flow of academics and professional teachers between schools and universities.

... teacher educators will not identify themselves as members of the teaching profession so long as there exists a university culture which values academic research and publishing over time spent in schools, working with teachers and student teachers, developing their pedagogy and at the same time advancing the body of pedagogical knowledge ... teacher educators who give priority to working in schools with teachers believe that their career prospects are limited (Ramsey 2000: 52).

One possible solution to this barrier would be to increase the involvement of industry in the funding of teacher preparation courses. If academic positions were co-funded by industry bodies such as education authorities (as happens in the health sciences), the selection criteria for such appointments and the responsibilities attached to the jobs could be different to those for tenured academic positions. For example, continuing involvement in school teaching could be a pre-requisite for the renewal of such appointments. The Brigham Young experience suggests that the duties of "clinical faculty" should be carefully defined so that the arrangement does not become simply a "separatist" partnership. Staff appointed to these positions should be involved in course delivery and research, to ensure that they are not sidelined into wholly practice-based pursuits such as the supervision of the practicum (Bullough Jr et al. 2004).

Gregor Ramsey calls for a “shared identity” between teacher education academics and professional teachers as members of the teaching profession. He points out that faculty in medical schools, for example, generally consider themselves clinicians first (ie. members of the medical profession) rather than academics who teach medical students. The Report of the NSW review also emphasises the importance of equality in partnerships between schools and universities. “Joint ownership, involving equal partners, is critical to the success of the program as this provides the framework for maximum collaboration” (Ramsey 2000: 52, 246).

As universities will need to change to develop a culture of professional education, schools may need to change too. The Holmes Group also envisaged schools as places where both teacher educators and teachers could systematically inquire into practice and improve it, recommending the establishment of Professional Development Schools (PDSs) which would serve teacher education in the same way as teaching hospitals serve medical education. There are now over 1000 Professional Development schools across 40 states in the USA.

Professional Development Schools (PDSs) are partnerships where schools and university have the shared goal of enhancing the education of professionals through a serious commitment to collaboration. All institutions involved share the belief that theory and practice are inextricably intertwined and through collaborative pre-service and in-service education, aim to provide the best professional education.

The types of activities that occur at University of South Carolina Professional Development Schools, include:

- collaboration on curriculum development;
- shared tutoring of pre-service teachers;
- significant numbers of pre-service teachers work in schools at various levels, from beginning practice teaching through to internships;
- the site provides appropriate space and basic materials, works to integrate pre-service teachers into the culture of the school, and provides time for in-service teachers to work with education students;
- site-based teachers and administrators are recognised in their role as teacher educators and serve in a variety of capacities such as clinical adjunct, seminar leader, guest lecturer, and co-teacher of university courses;
- teachers and administrators are involved in the development of teacher education programs;
- university-based faculty are involved in the delivery of pre-service education on-site through direct supervision of students, teaching pre-service courses on-site, and collaborative work with site-based teachers and administrators focused on the improvement of teacher education (University of South Carolina 2005).

In summary, the research highlights that there are many barriers to *authentic* collaboration between schools and universities – both attitudinal and structural. The general theme of the research is that genuine partnerships between schools and universities are worth the effort – because they improve the quality of professional learning in teacher preparation courses – but that genuinely collaborative partnerships can be quite difficult to achieve.

The evidence suggests that authentic partnerships must be built around shared practices and shared work, which then provide the basis for consistent, sustained and valued interaction between teacher educators and professional teachers. This means that teacher education academics should be more involved in the professional practice of teaching, and that practicing teachers should be more involved in course delivery and research in universities. The Professional Development Schools in the USA are a useful model of authentic partnerships in this sense. Any reform of teacher education in this direction in Australia will need the full support of industry partners, such as school authorities.

3. Professional standards for school leadership and teaching

Professional standards for teaching describe the skills, knowledge and values for effective teaching. They capture key elements of teachers' work, reflecting their growing expertise and professional aspirations and achievements. Standards make explicit the intuitive understandings and knowledge that characterise good teaching practice and enable this to be widely shared within the profession. (MCEETYA 2003: 2)

In response to public concern about the quality of teaching, there has been considerable interest in the use of professional teaching standards over the past two decades. Standards for leadership and teaching now exist in many jurisdictions within North America, the United Kingdom and Australia (MCEETYA 2003). But the concept of professional standards for teaching is not without its critics, and this issue has been the subject of on-going debate for at least a decade in Australia (see Emmett 2002, Ingvarson 1998, 1999, 2002, MCEETYA 2003, Sachs 2003, Senate 1998, Skilbeck and Connell 2003). Emerging from this debate, there is a growing consensus that professional standards have the potential to: enhance public understanding about the work of professional teachers; improve the professional status of teachers; and support teachers' professional learning throughout their careers.

How professional teaching standards improve student learning

Research suggests that when school authorities use professional teaching standards as criteria for licensing teachers, the educational outcomes of students improve. Many studies of the interaction between teacher certification and student learning outcomes conclude that teachers who are certified against standards have better student learning outcomes than teachers who are not certified, when other factors are held constant (Darling-Hammond 2000).

Standards may also be useful to support the professional learning and career pathways of teachers, particularly in the context of the more flexible or "portfolio" patterns of career development that are increasingly common in today's workforce. There is increasing interest in the use of professional standards – as defined by the profession – to support and engage teachers in on-going professional learning (Ingvarson 1998, MCEETYA 2003: 4). The use of advanced standards for accomplished teaching is linked to superior student learning outcomes. In 1987, the National Board of Professional Teaching Standards (NBPTS) was established in the USA to establish high and rigorous standards for accomplished teachers and to operate a voluntary system to assess and certify teachers on the basis of the standards. Between 1994-95 and 2003 the Board certified 32,000 teachers out of 65,000 applicants. Several recent studies of the impact of teachers certified by the National Board for Professional Teaching Standards (NBPTS) found students of NBPTS-certified teachers achieved higher grades compared to students in other classes, when other variables are held constant. The findings were from studies of high school mathematics teachers in Florida (Cavalluzzo 2004), primary school students in Arizona (Vandevoort et al 2004) and primary schools in North Carolina (Goldhaber and Anthony 2004).

Goldhaber and Anthony conclude that the NBPTS process for assessing accomplished teachers is effective in identifying the best teachers among applicants. Prior to becoming certified, NBPTS-certified teachers were more effective at improving student achievement than their non-certified counterparts. The authors suggest that this finding indicates that the NBPTS certification process in itself may not necessarily improve teacher quality, but merely identifies teachers who are already performing at a high level (Goldhaber and Anthony 2004). As this research suggests that advanced standards for accomplished teaching are simply an identifier of teacher quality rather than an instrument for developing high quality teachers, it could be argued that there is no direct benefit from certification against standards in terms of improving student learning – ie. if the certified teachers are already performing to a high standard prior to certification, then certification to the standard will not improve student outcomes to any significant degree. But other research suggests that professional standards for accomplished teaching play an important role in supporting teachers' professional learning throughout their careers (Ingvarson 1998, Sachs 2003, NBPTS 2001, 2005).

The usefulness of professional teaching standards depends largely on how they are used by employing authorities or the profession itself, to regulate and to support the work of teachers. There are three domains in which standards can be used to promote quality teaching: the process of teacher selection; the provision of support for teacher professional development; and in responding to complaints about teachers' professional practice.

First, professional standards can be used for the selection of teachers. In most countries, a minimum set of standards is used by all employing authorities to select teachers for employment at entry-level. These standards usually require the applicant to be trained in an accredited program, and in some jurisdictions, to pass a test. The US experience – documented by Linda Darling-Hammond – confirms that teachers who meet the minimum entry standards for registration are more effective (in terms of producing student learning outcomes) than teachers who do not meet the standard but are permitted to teach.

Second, standards for accomplished teaching can be used to support teachers' professional development and to provide incentives and recognition for attaining advanced standards of teaching. As Lawrence Ingvarson points out, a rigorous set of professional standards that guides the ongoing professional development of teachers can support a staged career structure for teachers and pay systems that provide incentives and recognition for attaining particular teaching standards (Ingvarson 1998: 1009). Employers of teachers in the USA who recognise NBPTS-certification as an indicator of high performance are increasingly using it to allocate rewards for high performing teachers, through hiring practices, pay rates or tenure conditions. These rewards may encourage high-performing teachers to remain in the teaching profession. They may also be used to select and reward high-performing teachers in difficult teaching environments (Goldhaber and Anthony 2004, Leigh and Mead 2005).

Third, a set of professional standards can be a useful benchmark for assessing complaints against professional teachers who are accused of failing to uphold the standards of the profession. The Ontario College of Teachers has three sets of standards governing its members: standards of practice; ethical standards; and professional development standards. However, as these standards are aspirational statements, they are not used in hearings about professional misconduct. In cases of alleged professional misconduct, the "standards of the profession" refer to conduct

that is deemed reasonable or unreasonable by a group of peers on a disciplinary panel. “Professional standards” for the purpose of misconduct hearings are therefore implicit, rather than explicit, although they are likely to be based indirectly on the aspirational standards for teachers defined by the College. To be effective in this way, investigations of professional misconduct must be backed up with the power to sanction or de-register the individual teacher if the allegations are upheld. The Ontario College of Teachers, the General Teaching Council of Scotland, and several state-based teacher registration bodies in Australia have responsibility for investigating complaints against members of the profession and for applying a range of sanctions that range from reprimands through suspensions and to de-registration (Ontario College of Teachers 2005, Victorian Institute of Teaching 2005).

In summary, there has been widespread debate on the issue of professional standards for teachers for over a decade in Australia, leading to a consensus that professional standards – developed and “owned” by professional teachers – have the potential to improve the quality and status of teaching and to support teachers’ professional learning. From overseas experience, we know that entry-level standards are useful in identifying effective teachers for employment, and advanced standards are successful in identifying practicing teachers who are performing at a high level. But the potential of professional standards to improve student learning depends on both the quality of the standards and the way in which they are used. Professional standards – developed and “owned” by professional teachers – are likely to have most impact on the quality of teaching and learning, when they are applied to specific purposes, such as:

- setting conditions of to be identified as a professional teacher (a licence to practice);
- supporting teachers’ professional development throughout their careers and providing a basis for recognising and rewarding teachers who attain advanced standards; and
- the application of sanctions (from warnings through to dismissal) to practitioners who are found guilty of professional misconduct or who fail to meet professional standards.

Standards for a professional teacher

... any set of professional standards for teaching needs to be owned and overseen by the profession itself (Sachs 2003: 185)

There is widespread agreement among stakeholders that professional standards for teaching should be developed and “owned” by professional teachers. Opposition to the development of professional teaching standards is based on concerns that standards could be used to “de-skill” teachers by failing to adequately encapsulate the nature of teachers’ work. It is also possible that standards based on the expectation of continual professional development could be used to further intensify the work of teachers. To avoid the situation where “professionalism under the guise of standards becomes a tool for employers demanding more of teachers” (Sachs 2003: 184), stakeholders argue strongly for standards to be developed and “owned” by professional teachers.

To establish credibility among professional teachers, any set of professional standards must be the product of extensive consultation and debate. Geoff Emmett suggests that the failure of previous attempts to develop professional teaching standards in Australia was due in part to the limited input by teachers themselves (Emmett 2002: 3). He cites Brock's observation that any standards of professional practice "that did not involve proper consultation would lack credibility. . . provide little more than rhetoric and would have no perceptive impact on practice" (Brock 2000: 9).

The standards statements for professional teachers that have been developed in Western countries often talk about teachers' work in terms of two broad areas: professional knowledge and professional practice. The standards developed in various jurisdictions differ in how they present information about these two areas. Many include information about ethical practice within standards of professional practice, and some present ethics as a separate category. Some agencies have developed a separate set of standards about professional learning while others see professional learning as embedded in standards for professional teaching (NSWIT 2005, MCEETYA 2003 and Ontario College of Teachers 2005).

The *National Framework for Professional Standards for Teaching* developed by MCEETYA in 2003 suggests that the professional elements of teachers' work could be grouped in four "interdependent and overlapping" elements: professional knowledge; professional practice; professional values; and professional relationships (MCEETYA 2003). As teachers' work cannot be compartmentalised into exclusive categories – which is acknowledged by MCEETYA – such "elements" simply serve as organising categories within which the content of the standards is developed. Thus when we compare statements of professional teaching standards from different sources, we find that while the organising categories differ, the content of the professional standards is broadly similar, albeit with differences in emphasis reflecting the source of the document. For example, the Ontario College of Teachers groups its standards into three categories:

1. *Standards of Practice* articulate what teachers know and practice daily;
2. *Ethical Standards* convey teachers' beliefs and values in their professional relationships with students, colleagues and diverse educational partners; and
3. A *Professional Learning Framework* which assists teachers in identifying ways they learn, integrate their knowledge into their work and engage in ongoing professional development.

The Standards for Qualified Teacher Status, developed by the Teacher Training Authority in the UK are outcome statements that set out what a trainee teacher must know, understand and be able to do to be awarded QTS. The Standards are organised in three inter-related sections which describe the criteria for the award: 1) Professional Values and Practice; 2) Knowledge and Understanding; and 3) Teaching.

1. *Professional Values and Practice* standards outline the attitudes and commitment to be expected of anyone qualifying to be a teacher, and are derived from the Professional Code of the General Teaching Council (GTC) for England.
2. *Knowledge and Understanding* standards require newly qualified teachers to be confident and authoritative in the subjects they teach and to have a clear understanding of how all pupils should progress and what teachers should expect them to achieve.

3. *Teaching Standards* relate to skills of planning, monitoring and assessment, and teaching and class management. They are underpinned by the values and knowledge covered in the first two sets of standards.

In Australia, the New South Wales Institute of Teachers' *Professional Teaching Standards Framework* specifies teaching standards under seven headings or "elements" to cover the domains of professional knowledge, learning and commitment. The elements are:

1. Teachers know their subject/content and how to teach that content to students.
2. Teachers know their students and how students learn.
3. Teachers plan, assess and report for effective learning.
4. Teachers communicate effectively with their students.
5. Teachers create and maintain safe and challenging learning environments through the use of classroom management skills.
6. Teachers continually improve their professional knowledge and practice.
7. Teachers are actively engaged members of their profession and the wider community.

The most comprehensive statement about professional teaching standards is probably the model developed by the US National Board for Professional Teaching Standards in 1987. In this model the Board identifies "Five Core Propositions" to describe the knowledge, skills, and dispositions that characterise accomplished teaching, as their organising principles for defining professional standards (NBPTS 2001).

The Five Core Propositions identified by the National Board are:

1. Teachers are committed to students and their learning.
2. Teachers know the subjects they teach and how to teach those subjects to students.
3. Teachers are responsible for managing and monitoring student learning.
4. Teachers think systematically about their practice and learn from experience.
5. Teachers are members of learning communities.

Each proposition is seen as a philosophical statement about "what teachers should know and be able to do". The propositions combine both a description of teachers' work with information about the skills they use to do their job. In this sense, the propositions are more complex and unifying than the competency-based approach to standards that has attracted criticism in the past (MCEETYA 2003:2).

The work of the US National Board for Professional Teaching Standards differs from other agencies in that the Board is established explicitly to define and accredit teachers against *advanced* standards of professional practice, as opposed to the entry-level standards that are defined and applied by teacher registration authorities. These advanced standards are intended to represent the professional standards of teachers with at least three years' teaching experience, and provide a basis for accrediting teachers who are relatively accomplished. The professional teaching standards defined beneath each of the Board's five core propositions are detailed and specific in their application. The Board sets standards and offers certification in nearly thirty categories,

based on the subject area and the developmental level of the children being taught (see Attachment A). For example, to attain the Generalist/Early Childhood Certificate offered by the NBPTS, teachers must demonstrate their accomplishments under nine standards:

1. Understanding young children
2. Equity, fairness and diversity
3. Assessment
4. Promoting Child Development and Learning
5. Knowledge of Integrated Curriculum
6. Multiple Teaching Strategies for Meaningful Learning
7. Family and Community Partnerships
8. Professional Partnerships
9. Reflective Practice

In summary, statements of standards for teaching indicate what teachers are expected to know and do in the areas of professional knowledge and professional practice. As statements of professional standards indicate the skills and accomplishments associated with effective teaching, they are useful for aspirational purposes and provide a structure to support teachers' continuing professional development. Sets of standards vary in their level of detail, depending on the purpose they serve. A key purpose of professional teaching standards is to determine entry-level criteria for employment as a teacher. Standards are also useful to support career progression and professional development. Detailed sets of standards, such as those developed by the National Board of Professional Teaching Standards in the USA appear necessary for the assessment of accomplished teaching practice, particularly to support the process of peer review.

The application of entry-level standards

The application of entry-level standards is common in most countries, although many jurisdictions in the USA do not apply the standards in times of teacher shortage.

There are two main ways in which entry-level standards can be applied:

1. requiring completion of an approved or accredited course; and
2. requiring the applicant to pass a test.

Over the past five years in Australia, teacher registration authorities have been established by state and territory governments in every jurisdiction, including the ACT, and they all have responsibilities regarding the accreditation of pre-service courses. Course approval and accreditation is also the responsibility of non-employer bodies in the UK and Ontario. In the USA, pre-service teacher preparation courses are usually accredited by state licensing authorities, and licensing requirements vary between jurisdictions.

The extent to which authorities are prescriptive in their processes for approving or accrediting teacher preparation courses varies. State employing authorities are often indirectly involved in the specification of pre-service course content, through

negotiations with course providers. Many teacher education faculties in universities liaise closely with the major employer of their graduates – the state or territory education departments – and respond to requests from future employers regarding course content. Employing authorities may also have a “preferred” course provider, from whom they select graduates in the first instance. These informal arrangements are not well documented in the literature, but are mentioned in the Victorian Review of Teacher Training (Parliament of Victoria 2005).

The minimum formal requirement for course approval in Australia is that it must be a degree course of three or four years duration in a recognised higher education institution. Beyond specifying this minimum benchmark, authorities have different processes for approving or accrediting pre-service courses. Some authorities – such as the South Australian Teachers Registration Board – merely confer with institutions about pre-service teacher preparation courses to ensure that minimum standards are met. But the general trend is towards a more formal process of course accreditation and review. According to James (2005), every teacher registration authority in Australia has developed or is considering the development of formal accreditation processes for pre-service teacher preparation courses. From our review of developments in each jurisdiction, websites, Queensland appears to be the most proactive registration body in this area.

The Queensland Teacher Registration Board has a clearly defined process for the accreditation of teacher preparation courses. The Board requires institutions to submit documentation that identifies how their course meets the Board’s *Guidelines* about the desirable content of teacher preparation courses. The Board’s *Guidelines* for courses identify desirable characteristics of teacher preparation courses in terms of the institution, the program design and professional experience components. After a process of consultation with the Board’s Professional Education Committee, the institution is granted “Phase One acceptance”, which grants registration, on the condition that the course will be delivered as indicated in the institution’s submission. When the first cohort of students is graduating from the Phase One program, the course is reviewed by a Board-appointed committee and if the review is favorable, “Phase Two acceptance” is granted for four years. Institutions must then submit annual updates to the Board and be subject to a Board review every four years (Board of Teacher Registration, Queensland 2005).

The course accreditation model of “guidelines – submission – review” that has been adopted by the Queensland Teacher Registration Board appears quite common, with variations in its application around the world. In the UK, for example, the Teacher Training Authority (TTA) specifies criteria such as minimum time spent on the practicum and time spent on core subjects but does not specify the minimum length of time for a course. In Canada, the Ontario College of Teachers specifies 15 conditions that teacher education programs must meet to be accredited by the College (James 2005).

Teacher testing is common in many states of the USA, with many tests focusing on subject content knowledge rather than professional knowledge and teaching practice. In Massachusetts, for example, educators seeking a licence to teach must pass a Communication and Literacy Skills Test and a Subject matter test (Department of Education, Massachusetts 2005). Teacher tests in many states of the USA have been criticised for their discriminatory effects, as non-whites and minorities are more likely to fail the tests than white students. (Pritchey-Smith 1989). Independent evaluations have also found the results of the Massachusetts Teacher Tests to be unreliable due to poor design quality (Fowler 2001; Haney, Fowler, Wheelock, Bebell and Malec 1999).

Although research suggests that a teacher's verbal or intellectual aptitude correlates with better student achievement (Leigh and Mead 2005: 4), it is not established that teacher certification tests are the most effective way to measure such attributes.

There is currently no requirement in Australia for beginning teachers to pass a test as part of a licence to teach. Until recently, the Ontario College of Teachers required teachers to pass a Teacher Qualifying Test as a condition of certification. The test focuses on occupation-related knowledge and skills in one of three levels: primary/junior; junior/intermediate; and intermediate/senior. The test is four-hours long and consists of 36 multiple-choice questions (25 per cent of total score) and 14 short-answer questions (75 per cent), relating to professional knowledge and teaching practice (Ontario College of Teachers 2005). A recent change in the requirements of the Ontario College of Teachers means that teachers do not have to sit the Test as a condition of accreditation. Instead, teachers with the appropriate qualifications are awarded provisional certification – which enables them to teach in Ontario schools – in the expectation that they will complete a “qualifying assessment” within a year, to obtain a full licence. Details of the qualifying assessment have yet to be announced (Client Services 2005).

In summary, the application of entry-level standards for teachers is common in most countries, although many jurisdictions in the USA do not apply the standards in times of teacher shortage. Over the past five years in Australia, teacher registration authorities have been established or announced in every state and territory, for the primary purpose of regulating the employment of teachers. The main mechanism through which teacher registration authorities certify entry-level teachers is through the accreditation of pre-service teacher preparation courses. While some employing authorities in the USA require teachers to pass a test as a requirement for certification, there is little evidence to suggest that this practice is effective in identifying competent teachers and it is not employed in Australia.

Standards for professional learning

The national framework for professional teaching standards issued by MCEETYA in 2003, proposed four stages of career progression (career dimensions) for teachers which “frame general and recognisable aspects of professional capacity and achievement”. The framework emphasises that the following descriptors are aspects of professional status, rather than detailed or sequenced events:

1. Graduation – a beginning teachers equipped with the skills to engage in and negotiate a process of on-going professional learning
2. Competence – effective teachers granted full entry to the profession based on successful teaching experience
3. Accomplishment – teachers who are highly accomplished and highly regarded by their peers. They engage in on-going professional learning and contribute to the professional learning of their colleagues. They interact professionally with diverse audiences and the community

4. Leadership – transformative professionals with a record of outstanding teaching, a commitment to on-going professional development, and a talent for applying problem-solving skills to educational problems. Effective communicators with the community and their profession.

(MCEETYA 2003: 9-10)

A set of professional standards that defines stages of professional development throughout a teachers' career can be used to support a staged career structure that offers teachers incentives and recognition for the attainment of advanced teaching standards (Ingvarson 1998). Traditionally, teachers have received automatic annual pay rises for years of service according to a rising pay scale. A recent trend is for teachers' career progression to depend more on formal performance appraisal. Employing authorities are reducing the number of years over which automatic pay increases are awarded, and are creating new positions for which teachers must apply or which are awarded as a result of a performance appraisal based on professional standards.

In England and Wales, for example, teachers are paid according to their annual progression on a six-point scale, but they can start above the minimum if they have relevant other experience and can "double-skip" points for excellent performance. Beyond this scale, teachers can apply to be assessed against eight nationally agreed standards of teaching, and if successful, they are able to move on to a three-point Upper Pay Scale. Another separate pay scale applies for Advanced Skills Teachers (ASTs). The AST scale applies to teachers who do not wish to apply for management positions but are involved in the training and support of other teachers. There is also a Fast Track Teaching Program to accelerate the career development of teachers with leadership potential. Fast Track Teachers begin at a higher point on the six-point scale and receive an annual bonus payment while on the program. The performance of all teaching staff is reviewed annually through performance appraisal agreements (GovernorNet 2005, Department for Education and Skills 2004).

Yet the teachers themselves appear to have minimal involvement in this process. The annual performance appraisal of teachers in England and Wales is partially based on performance standards and the monitoring of teacher performance is hierarchical and school-based. The annual performance reviews mandated under the English system are in the form of negotiated performance agreements between team leaders or supervisors and individual teachers. Career progression in England and Wales is thus determined largely by managers at the school level, rather than a professional body (Teachernet 2005). Similarly, in Ontario, teacher performance is assessed at the school or district level, but may be based on the College's Standards of Practice.

In contrast, the system used to determine accomplished teaching by the National Board of Professional Teaching Standards in the USA is peer-assessed by professional teachers. The peer assessment process is time-consuming and expensive, yet research suggests that the peer-assessment system operated by the NBPTS is effective in identifying accomplished teachers – as measured by improved learning outcomes among students (Cavalluzzo 2004, Vandevoort *et al.* 2004, and Goldhaber and Anthony 2004).

The National Board of Professional Teaching Standards uses a range of tools in its performance assessments of accomplished teachers. Teachers seeking certification from the National Board are required to participate in a comprehensive peer-reviewed assessment as well as a written examination. Applicants must submit a comprehensive portfolio comprised of videotapes of their teaching, a selection of

student work samples, learning products, and detailed analyses of their practice. The portfolio is designed to capture teaching in real-time, real-life settings, to allow trained assessors to examine how teachers translate knowledge and theory into practice. Teachers also complete a series of written exercises that probe the depth of their subject-matter knowledge, as well as their understanding of how to teach those subjects to their students.

In addition, applicants must be examined on content specific to their fields. For the Generalist/Early Childhood Certificate, there is a three hour examination that requires applicants to demonstrate their knowledge and skills in the six areas of: literacy; mathematics; science; social studies; children's play; and physical education, health and safety. A successful candidate will be issued National Board Certification for a period of 10 years, after which they must renew their certification through a process that demonstrates continuing professional growth. The cost to individuals is US\$2300 for initial certification and US\$1,150 for renewal (NBPTS 2001, 2005).

The process of seeking certification through the NBPTS appears to support the professional development of teachers. The NBPTS reports that the majority of teachers who have participated in National Board Certification state it is the most powerful professional development experience of their careers. They say the experience changes them as professionals and that through the process they deepen their content knowledge and develop, master, and reflect on new approaches to working with their students (NBPTS 2001, 2005). Thus the professional standards developed by the NBPTS contribute to an "infrastructure for professional learning", which enables teachers to gain the knowledge and skill embodied in the teaching standards (Ingvarson 1998: 1009).

One benefit of a rigorous system of peer-assessment to establish the attainment of advanced standards is the establishment of employer confidence in professional standards as a basis for awarding pay increases and career progression to individual teachers. The NBPTS system of certification for accomplished teachers is increasingly recognised by employers as a benchmark for rewarding accomplished teachers, through hiring practices, pay rates or tenure conditions. Many employing authorities throughout the USA now offer pay increases or bonuses for NBPTS-certified teachers. In California, NBPTS – certified teachers are awarded a pay bonus for teaching in high-poverty schools. Some employers also encourage practicing teachers to engage in the certification process by paying their application fee or providing release time for preparation of their portfolios for assessment (Goldhaber and Anthony 2004, Leigh and Mead 2005).

The NBPTS system of certification for advanced teachers bears out Ingvarson's prediction that a rigorous set of professional standards that guides the on-going professional development of teachers can support a staged career structure for teachers and pay systems that provide incentives and recognition for attaining particular teaching standards (Ingvarson 1998: 1009). The National Board of Professional Teaching Standards (NBPTS) was established in 1987 explicitly to establish high and rigorous standards for accomplished teachers and to operate a voluntary system to assess and certify teachers on the basis of the standards. Between 1994-95 and 2003 the Board certified 32,000 teachers out of 65,000 applicants. Teachers in any jurisdiction can apply to be assessed against the NBPTS standards after they have been practicing as a licensed teacher for three years. Only 50 per cent of first-time applicants are certified under the NBPTS, compared to around 90 per cent of candidates applying for licensure for the first time (NBPTS 2001, Goldhaber and

Anthony 2004). NBPTS-certification only lasts for ten years, whereupon teachers must re-apply through a process that requires demonstration of continuing professional growth.

To date, teachers' professional associations – apart from the NBPTS – have had limited success in using professional standards for the purpose of obtaining recognition and financial rewards for accomplished teaching. In Australia, the new teacher registration bodies in each state and territory all grant teachers membership for life subject to the payment of an annual fee, except for the Western Australian College of Teaching which grants membership for five years with renewal subject to participation in recognised forms of professional learning. Only one registration body – the NSW Institute of Teachers – has developed a *Framework for Professional Teaching Standards* that identifies four stages of career progression – graduate teacher, competent teacher, accomplished teacher, and educational leader (NSWIT 2005). Statements from the NSW Government suggest that the attainment of the latter two stages – accomplished teacher and educational leader – will be based on some form of peer review (Minister for Education and Training 2004). At this stage, there appear to be no financial rewards attached to these higher levels of performance in New South Wales. But, based on the NBPTS experience, if the peer-assessment process is sufficiently rigorous to identify effective teachers, employer confidence in the system may lead to pay increases and career progression for individual teachers who are awarded these titles by the profession in New South Wales.

In Scotland, the General Teaching Council is a professional association that has a role in assessing the performance of accomplished teachers who will be awarded pay increases from the government. In a recent policy reform, the government introduced the new grade of “Chartered Teacher” for teachers who do not wish to leave the classroom. The General Teaching Council for Scotland has the responsibility for awarding “Chartered Teacher” status to its members. The award of Chartered Teacher is based on professional standards and teacher performance is assessed by a National Panel of Assessors appointed by the Council. The accreditation process for Chartered Teacher is similar to, albeit less complex than the process followed by the National Board for Professional Teaching Standards in the USA. However, the General Teaching Council offers an alternative route to Chartered Teacher status, which is not peer-assessed. If the teacher successfully completes a specified Masters degree program at an approved institution, he or she is automatically granted Chartered Teacher status (General Teaching Council for Scotland 2005). There is, as yet, no research to indicate the effectiveness or otherwise of the Scottish approach, which is in its infancy. But US research on teacher quality suggests that the link between possessing a postgraduate degree and accomplished teaching is weak (General Teaching Council for Scotland 2005, Darling-Hammond 2000).

There are many barriers to the use of professional teaching standards for the purposes of career progression and granting financial rewards to teachers. Judyth Sachs points out that certification and career progression are “the most political dimensions of the standards schema” and are therefore the most difficult areas for teachers to control or influence, citing a couple of recent failures to link professional standards to career progression in Australia (Sachs 2003: 183). Lawrence Ingvarson suggests that the commitment of the profession to reforms concerning the development and assessment of teaching standards will depend on the creation of an independent institution through which the profession can exercise responsibility for

these tasks *in partnership with* employing authorities. He argues that such an institution should be structured to enable representatives of both teachers and school authorities to talk on equal terms (Ingvarson 2002).

In summary, the national framework for professional teaching standards issued by MCEETYA in 2003, proposed four stages of career progression (career dimensions) for professional teachers:

1. Graduation – a beginning teacher equipped with the skills to engage in and negotiate a process of on-going professional learning;
2. Competence – effective teachers granted full entry to teaching based on successful teaching experience;
3. Accomplishment – teachers who are highly accomplished and highly regarded by their peers. They engage in on-going professional learning and contribute to the professional learning of their colleagues. They interact professionally with diverse audiences and the community; and
4. Leadership – transformative professionals with a record of outstanding teaching, a commitment to on-going professional development, and a talent for applying problem-solving skills to educational problems. Effective communicators with the community and their profession.

At this stage, professional associations are not widely engaged in using professional standards as a mechanism to support professional development and career progression in association with employers. The exceptions are American employing authorities that award salary increases to NBCTS – certified teachers, and the Scottish General Teaching Council's role in determining who is awarded Chartered Teacher Status. In Australia, at this stage the New South Wales Institute of Teachers is the only registration body to identify four stages of career progression within its framework of professional teaching standards, based on the MCEETYA framework. In general, the assessment of accomplished teaching remains the responsibility of employing authorities and may only be partially based on professional standards. Nevertheless, the model of assessing accomplished teaching developed by the National Board of Professional Teaching Standards in the USA is respected by teachers and is gradually gaining recognition among employers as a tool for making decisions about recruitment, pay incentives and career progression among accomplished teachers.

Upholding standards of professional conduct

As set of professional standards defines the conduct expected of a professional teacher, it may be used to exclude, de-register or sanction members of the profession who are not performing at the expected standard. This is one further way in which professional standards may be used to enhance the quality and status of teaching.

There is a common perception in the media that the power of employers to sanction teachers and principals for failing to meet performance standards is weak. A review of American public opinion surveys by the Public Policy Institute found that the majority of Americans believe it should be easier to remove teachers who are not performing to standard (Johnson and Duffett 2003: 13). The Public Policy institute also reports that practicing teachers in American schools freely acknowledge that some

teachers shouldn't be teaching. Seventy-six per cent of teachers agree that there are several or more teachers in their building who "fail to do a good job and are simply going through the motions". In a 2002 survey, 53 per cent of American teachers reported, "the tenure system should be changed to make it far easier to remove bad teachers". Nevertheless, teachers still support the tenure system as a mechanism to protect good teachers against unfair treatment (Farkas, Johnson and Duffett 2003: 20).

Gregor Ramsey's report for New South Wales argues that poor-performing teachers are not removed from the profession in Australia.

A widely held perception exists that teachers of low quality are not formally identified as a matter of course, and very few are eventually excluded from practice if all efforts to improve their performances fail (Ramsey 2000: 127).

The Ramsey report suggests that if the quality of teachers is to be improved, then issues related to proficiency should be removed from the industrial arena and confronted as issues of quality assurance by the profession, and as professional accountability issues by employers (Ramsey 2000: 127).

In many instances overseas but generally not in Australia, professional associations are given the responsibility by employers – or take it on themselves – to investigate complaints of professional misconduct in respect of their members and to apply sanctions against those members if the complaints are substantiated. Such investigations are undertaken by a panel of peers. The General Teaching Council for Scotland plays this role, as does the Ontario College of Teachers, and several of the state-based teacher registration bodies recently established in Australia.

The Ontario College of Teachers has the power to de-register teachers if they are found guilty of professional misconduct or are unfit to practice. As all teachers in Ontario public schools must be members of the College, this role of the teachers' professional association is effective in removing some teachers from practicing in the classroom. The College applies a range of sanctions, from warnings through suspension to de-registration, to teachers who are found guilty of professional misconduct through the College's disciplinary process. The 27 items defined as professional misconduct in the Act of Parliament governing the College are quite comprehensive (see list in Attachment B). They include: misrepresentation and falsification; failing to maintain the standards of the profession; abusing a student physically, sexually, verbally, psychologically or emotionally; practicing under the influence of drugs or alcohol; practicing with a conflict of interest; failing to adequately supervise a person who is under their professional supervision; and failing to keep records as required by his or her professional duties. In most cases where the College recommends de-registration, the teacher has also been tried and found guilty by the criminal justice system. Nevertheless, the College's Disciplinary process does deal effectively with many allegations of professional misconduct that do not appear before the courts, and thus plays a role in upholding minimum standards of professional conduct in teaching (Ontario College of Education 2005).

In Australia, the New South Wales Institute of Teachers does not have responsibilities for investigating complaints, though it can de-register members who have been found guilty of offences under other legislation (see Section 24 of the *Institute of Teachers Act 2004*, NSW). In other jurisdictions, the Teachers' Registration Boards in SA and NT have limited or no responsibilities in this area. The recently established Tasmanian

Teacher Registration Board does have disciplinary and inquiry powers under its Act, as does the Western Australian College of Teachers. The Victorian Institute of Teaching has a well-developed role in this area.

The Victorian Institute of Teaching has extensive responsibilities for investigating complaints made against its members. In 2003-04, the Institute received over 99 complaints against teachers involving serious misconduct, serious incompetence or fitness to teach, most of which were lodged by the Department. The Institute has conducted a number of informal and formal hearings, applying sanctions and de-registration where applicable. The *Victorian Institute of Teaching Act 2001* spells out the role of the Institute in this regard. The Institute is currently in the process of developing a code of ethics and a code of conduct to support its disciplinary work (Victorian Institute of Teaching 2004).

The Ontario College of Teachers also investigates complaints that allege a member is unfit to practice due to incompetence or incapacity. A committee of investigation hears the case and determines if the teacher is unfit to carry out his or her professional responsibilities. If a member is found to be unfit, the committee specifies any terms or conditions it considers appropriate, such as revoking a certificate, suspension, requiring the provision of evidence that a physical or mental disorder has been resolved, or fixing a period during which the teacher is ineligible for reinstatement. These hearings are usually closed to the public (Ontario College of Teachers 2005).

In summary, as professional standards define the conduct expected of a professional teacher, they may be used to sanction or de-register teachers who are failing to perform at the expected standard. Professional standards are used in this way in Australia and overseas. The Ontario College of Teachers and the Teaching Council of Scotland are associations which have the power to de-register teachers if they are found guilty of professional misconduct or are unfit to practice. Several of the recently established teacher registration bodies in Australia also have the power to play this role. The Victorian Institute of Teaching, in particular, has extensive responsibilities for investigating complaints made against its members. Investigating complaints against their members for failing to maintain standards is one further way in which professional standards may be used to enhance the quality and status of teaching. And there is some evidence of a willingness on the part of employers to transfer responsibility for this role to teacher registration authorities or other professional associations.

A self-regulating profession

A self-regulating profession takes responsibility for maintaining the quality of its members' services, through a range of quality assurance mechanisms. By developing professional standards, the profession has a basis for inviting members to join, benchmarks for members who want to maintain their membership, an infrastructure to support members' professional learning and career progression, and reasons for excluding members who are not performing at the professional standard. In this way, a self-regulating profession uses professional standards to enhance the quality of its services.

Rigorous mechanisms for upholding professional standards are essential for an effective self-regulating profession, as the profession's standing in the community rests on a promise or "social contract" that it will regulate its members.

Central to the concept of a profession is the notion of reciprocity. The community bestows on the profession the responsibility and privilege of self-regulation, and in return the professional fulfils the obligations of its social contract (Ramsey 2000: 125).

Professional standards are not likely to enhance quality unless the profession and/or employing authorities have mechanisms in place to apply the standards to entry-level teachers, to support members in attaining the standards and to sanction members of the profession who do not uphold the standards. These roles can be carried out by employers, or by the profession itself. Professional standards are most effective if they have the support of both the profession and employing authorities and if these two parties work together to share the roles of developing, implementing and defending the standards of the profession.

In respect of teaching, it is rare for any one organisation to carry out all three roles of: applying entry-level standards; guiding professional learning and career progression; and upholding professional standards through the investigation of complaints. The General Teaching Council of Scotland is one example of an association that carries out all three roles, in collaboration with employing authorities. Although the Ontario College of Teachers regulates the admission of entry-level teachers and has responsibility for investigating complaints regarding professional misconduct, its professional standards are not used by employers to support the career progression of teachers. Conditions of promotion and career progression are the responsibility of local employing authorities.

In Australia, the roles of the teacher registration bodies established or in the process of being established in each state and territory are not yet comprehensive. Of the three key roles of any professional association: 1) licensing; 2) professional development and career progression; and 3) regulation of the profession, all state-based teacher registration bodies currently perform the first role. At this stage, the New South Wales Institute of Teachers is one of the few registration bodies to define standards of professional development and career progression. And the Victorian Institute of Teaching is heavily involved in investigating complaints against its members. There is no national professional body with responsibility for all three roles and most state-based registration bodies appear focused on the licensing role.

Nevertheless, the scope of the functions of state-based teacher registration bodies in Australia is evolving rapidly. There is a growing trend for legislative change where not only do the teacher registration boards carry out all three functions of: licensing; professional development and career progression; and regulation of the profession. All registration bodies in the states and territories either have been or are working on the development of professional standards. Legislation in this area was passed in Western Australia in September 2004 and revised legislation for SA was passed in 2005. The Western Australian College of Teaching is currently developing ethical standards and professional standards, and has just published the process for moving from provisional to full registration that involves professional learning and a mentor. The WA College of Teaching is also unique in that it is independent of the Minister. Under the relevant legislation, the College is required to 'give due regard to any advice given by the Minister' (Section 14).

The functions and powers of the Western Australian College of Teaching (section 16 and 17) are broad in scope and may provide a blueprint for other state-based registration bodies. The functions are:

- (a) to enhance the status of the teaching profession by facilitating the professional growth and development of teachers throughout their careers;
- (b) to establish and promote professional standards and values relating to teaching in schools;
- (c) to provide and foster professional leadership within the teaching profession;
- (d) to identify areas of priority for research in relation to teaching and education in schools and the education of teachers and, where appropriate, to promote, subsidise or conduct such research;
- (e) to confer and collaborate with persons who employ or engage teachers, teacher education institutions, the teaching profession, teacher organisations and the general community in relation to standards of courses of teacher education acceptable for the purpose of teacher registration and to provide advice on this to the Minister;
- (f) to promote and encourage –
 - i. the continuing education of teachers in the practice of teaching; and
 - ii. increased levels of skill, knowledge and competence in the practice of teaching;
- (g) to encourage and facilitate diversity, flexibility and responsiveness in the education of teachers;
- (h) to advise the Minister on matters to which this Act relates;
- (i) to administer the scheme of registration under Part 4; and
- (j) to perform –
 - i. the disciplinary and other functions that are conferred on the College by this Act; and
 - ii. any functions conferred on the College by any other Act.

The Australasian Forum of Teacher Registration and Accreditation Authorities (AFTRAA) was formed two years ago to enable registration bodies from all the states and territories in Australia and New Zealand to work together and to aim for as much consistency as possible.

In other professions, there are long-standing examples of national professional bodies that perform all three roles. Engineers Australia (formerly the Institution of Engineers, Australia) is an example of a professional association that performs all three roles associated with implementing professional standards. It registers all members of the profession. It offers five grades of membership according to career progression (Student, Graduate, Member, Fellow and Chartered Practitioner). To attain the two higher grades – Fellow and Chartered Practitioner – a member must be eminent in the field, comply with continuing professional development requirements, and undergo a competency-based assessment by a panel of peers that is moderated nationally. The grades apply across three occupational categories – Engineering Officer, Engineering Technologist and Professional Engineer. The application of grades for the category of Professional Engineer is illustrated in Table 1.

Like the Ontario College of Teachers, Engineers Australia has a clearly defined procedure for investigating complaints against its members who are bound by its by-laws, regulations and code of ethics. A tribunal hears complaints against members and if a member is found guilty of professional misconduct, such as fraud, misrepresentation, injury to the professional reputation of others or plagiarism, sanctions are applied. The sanctions include expulsion, suspension for up to five years, specified professional development, fines and reprimands. Members also have access to an appeals process (The Institution of Engineers, Australia 1999).

Table 1 Engineers Australia – Grades of Membership, and Eligibility Pre-requisites for a Professional Engineer

Grade	Occupational Category
Chartered Practitioner	<ul style="list-style-type: none"> • Eligible to be Member or Fellow • Stage 2 competency-based assessment comprising Professional Engineering Practice Report and Professional Interview • Evidence of compliance with Continuing Professional Development Requirements
Fellow	<ul style="list-style-type: none"> • Has followed or is following the profession of engineering and either: • Has held sustained major responsibility in the design or execution of important engineering work; or • Has high educational qualifications, has held a prominent position in the profession, and has made a major contribution to the science and practice of engineering; or • Has had suitable engineering education/training, extensive responsibility in the design/execution of important engineering work and has achieved exceptional eminence in the profession, • Assessment by panel of peers • Moderated nationally
Member	<ul style="list-style-type: none"> • Eligible to be Graduate • Minimum of three years acceptable work experience at level of Professional Engineer
Graduate	<ul style="list-style-type: none"> • Completion of an IEAust-recognised four-year engineering associate qualification in Australia or equivalent
Student	<ul style="list-style-type: none"> • Enrolled in an IEAust-recognised four-year professional engineering educational program in Australia

Notes: The occupational categories of Engineering Technologist and Engineering Officer are omitted from this table, but can be viewed in the source document.

Source: Engineers Australia (2005).

In other professions, the scope for self-regulation can be limited when complaints against members of a profession are resolved in court or by other tribunals. In the medical profession, for example, there is now relatively little self-regulation in regard to complaints against members or the application of sanctions, as all state and territory governments have established independent commissions to handle health complaints, and charges of malpractice are usually heard in court. Although professional associations for medical practitioners remain strong, they focus mainly on the issues of entry standards and continuing professional development. (see Royal Australian College of General Practitioners 2005, Royal Australasian College of Surgeons 2005).

Given the pre-occupation of state teacher registration authorities with their licensing roles, the National Board for Professional Teaching Standards in the USA has played a significant role in developing standards to support the professional development

and career progression of professional teachers. Its success in performing this role has provided a valuable mechanism to restore the status of teaching through the application of clearly defined professional standards and to support professional learning. These factors led to the establishment of the National Board in 1987, when its stated indirect aim was to “elevate the status of professional teachers, educate the public about the demands and complexity of accomplished teaching practice, and make teaching a more attractive profession for talented college graduates with other promising career options” (NBPTS 2001).

To maximise the potential of professional teaching standards, a profession must have the support and co-operation of employing authorities. If employers do not recognise the credentials of the association’s members in their employment policies, there is little incentive for professionals to join the association. In Ontario and Scotland, for example, the government supports the professional association by requiring membership as a criteria for employment in public schools. The professional association’s role in dealing with professional misconduct allegations is also supported by employers in these jurisdictions.

In Australia, the potential of professional standards to elevate the quality and status of teachers is complicated by the federal division of responsibilities for schooling. Teachers are employed by state governments and non-government school authorities at the state and territory level. But initial teacher education and a substantial proportion of professional learning are provided by higher education institutions that are funded and regulated by the commonwealth government. As differences in the practice of teaching between states and territories are minimal, teaching has a strong national identity, and many professional associations such as discipline-based associations, are convened at the national level. Given the overlap between levels of government with an interest in the quality of teaching, it is unlikely that all the roles relating to the development and implementation of professional standards for teaching will be carried out by one agency at either the state or the commonwealth level.

In the USA, state governments remain responsible for the licensing and registration of teachers while the National Board for Professional Teaching Standards is gaining national recognition as a professional association that supports professional development and career progression for teachers. This role is increasingly recognised by state employing authorities who use NBPTS – certification to determine the career progression, wages and employment status of accomplished teachers. The National Board was created in 1987 with the following aims: 1) to establish high and rigorous standards for what accomplished teachers should know and be able to do; 2) to develop and operate a national voluntary system to assess and certify teachers who meet these standards; and 3) to advance related education reforms to capitalise on the expertise of National Board (NBPTS 2001). National Board Certification complements, but does not replace, state licensing processes for teachers. National Board Certification establishes advanced standards for experienced teachers, whereas state licensing systems set entry-level standards for novice teachers. The Board’s primary role is to identify high quality performance among teachers, which it performs by identifying advanced standards for accomplished teaching and assessing applicants against them. NBPTS certification must be renewed after ten years.

In summary, professional teaching standards may be used to elevate the quality and status of teaching in many different ways. Given the overlap of roles and responsibilities between commonwealth and state governments in the area of teacher professionalism, it is unlikely that all the roles relating to the development and implementation of professional standards for teaching will be carried out by one agency at either the state or the commonwealth level. The role of the National Board for Professional Teaching Standards in the USA illustrates one way in which a national professional body can work to enhance the professional development and career progression of teachers, with the co-operation of state employing authorities. Ultimately the potential of a professional body to support its members through the development of professional standards, depends on the extent to which employers recognise and support its role. There is currently in Australia no national professional body that can undertake such a role.

4. Approaches to leadership learning and professional development for teaching

Since the 1980s, reform agendas have resulted in increased devolution of school management, greater autonomy in school governance and more competition between schools. These developments have had a significant influence on the role of school leaders, both in terms of how they manage schools and their increased accountability for students' learning outcomes. School leaders are now expected to guide their schools through a complex educational environment, involving ICT, curriculum standards, statewide benchmarking and accountability for student learning outcomes.

Schools in the 21st Century are vital locations for knowledge production and governments expect higher levels of leadership teachers and principals in responding to the challenges of a knowledge economy. The context of teaching is more demanding, with increasing diversity in student characteristics and variations in student learning needs. Schools are now expected to work with other agencies and the wider community to provide a more holistic environment of education and care for young people to prepare them to participate in an ever-changing economy and society (Elmore 2000, Kalantzis and Harvey 2003, Leithwood and Riehl 2003).

The role of school leaders has been the subject of educational research for almost a century. Much of the research over the past two decades investigates the role of leadership in the context of comprehensive school reform and portrays effective leadership as essential so that schools are successful in meeting the educational challenges of the 21st Century (Crowther 2003, Crowther *et al.* 2002, Elmore 1992, Camburn, Rowan and Taylor 2003).

Does leadership matter?

The idea that leadership matters is conventional wisdom, not only in education, but in many organisations. As Kenneth Leithwood points out, the evidence of this is often in the breach – we can spot the consequences of ineffective leadership more readily (because their organisations are so clearly dysfunctional) than we can identify effective leaders (whose organisations run smoothly). In addition, in schools, it is particularly difficult to demonstrate that leadership makes a difference, because of the large number of variables that influence student learning outcomes.

Traditionally, studies of school leadership have focused on the role of school principals, whereas in recent times, the leadership roles of teachers have been the subject of academic study and debate (see Crowther *et al.* 2003, Copland 2003, Sachs 2000). From traditional studies, there are two main types of research evidence on the impact of school leadership on school effectiveness. The main source of evidence is case studies conducted in exceptional schools (eg. schools that appear to be contributing to student learning either significantly above or below expectations). A second source of research evidence is large-scale quantitative studies. Over the past decade, several papers have been written that review this body of work and analyse a large set of studies to draw conclusions about the effects of school leadership (Creemers and Reezigt 1996, Hallinger and Heck 1996, Leithwood *et al.* 2004, Waters, Marzano and McNulty 2003).

These reviews of the research evidence suggest the following three findings about school leadership:

1. the total (direct and indirect) effects of leadership on student learning accounts for about a quarter of total school effects;
2. leadership effects are second only to teacher effects on student outcomes; and
3. leadership effects are usually greater in underperforming schools.

In their review of the research evidence from large-scale quantitative studies, Hallinger and Heck (1996) concluded that the combined direct and indirect effects of school leadership on pupil outcomes are small but educationally significant. While leadership only explains three to five per cent of the variation in student learning across schools, this is actually about one quarter of the total variation (10 to 20 per cent) explained by all school-level variables – after controlling for student intake factors (Creemers and Reezigt 1996).

Classroom factors (ie. teaching) explain only a slightly larger proportion (about one third) of the variation in student achievement (Leithwood et al. 2004). Thus leadership is second to teaching as the major school-based influence on student learning. Other school-based factors that explain variation in student learning include: shared vision and goals; learning environment; concentration on teaching and learning; purposeful teaching; high expectations; positive reinforcement; monitoring progress; pupil rights and responsibilities; home-school partnerships; and a learning organisation (Sammons, Hillman and Mortimore 1995). But as most of these characteristics – along with others associated with effective teaching (Hill 1998) – are factors over which school leaders can potentially exercise influence, it is probable that the impact of school leaders is understated in much of the research.

Achieving results through others is the essence of leadership. A finding that principal effects are mediated by other in-school variables does nothing whatsoever to diminish the principal's importance ... the research illustrates that these effects appear to compound as principals pursue school-level action (Hallinger and Heck 1996: 39).

Information about the impact of school leadership is often drawn from case studies conducted in exceptional schools (eg. schools that appear to be contributing to student learning either significantly above or below expectations). Although such research usually produces large leadership effects, the results are not readily generalisable (Gezi 1990, Gurr et al. 2003). Leithwood et al. (2004) address this limitation by collecting a relatively large number of cases of successful leadership, reporting the results of systematic cross-case analyses and carrying out quantitative tests of the results provided by the qualitative evidence. They conclude that although the evidence shows small but significant effects of leadership actions on student learning across a spectrum of schools, the demonstrated effects of successful leadership are considerably greater in schools that are "in more difficult circumstances". They observe that, "there are virtually no documented instances of troubled schools being turned around without intervention by a powerful leader. Many other factors may contribute to such turnarounds, but leadership is the catalyst" (Hallinger and Heck 1996, Leithwood and Jantzi 2000, Leithwood et al. 2004: 5).

In summary, it is difficult to demonstrate that leadership makes a difference to the quality of school education, because of the number of variables that influence student learning outcomes. The impact of leadership on learning outcomes is often indirect because effective leaders work through others (ie. teachers) to achieve results. When these factors are taken into account, research suggests that the total (direct and indirect) effects of leadership on student learning accounts for about a quarter of total school effects. Leadership effects are second only to teacher effects in their impact on student learning. The research also suggests that leadership effects are usually greater in underperforming schools. In other words, it is unlikely that an under-performing school will be “turned around” without the intervention of an effective leader.

Models of school leadership

Many models of school leadership have been developed. Some of these models are specific to education, while others (eg. “transformational leadership”) are drawn from a wider research base. There are few agreed definitions of what is encompassed under each model. The various models reflect developments in thinking about what constitutes effective leadership in a school and advocate different ways of “doing” leadership in practice. The models are not mutually exclusive and it is quite possible that several models could be practiced in one school at the same time, to good effect.

Instructional leadership

A heavily researched concept is “instructional leadership”, which refers to exercising leadership in teaching and learning to improve educational outcomes for students. The idea of instructional leadership is a distinct theory of leadership for school education. Research on instructional leadership represents a departure from the application of general theories of staff management and administration to school education that characterised early work in the field of educational administration (Cavanagh *et al.* 2004).

The vast literature on instructional leadership specifies leadership practices and provides some evidence of the impact of these practices on organisations and student outcomes. There is no one model of instructional leadership although the studies all focus on defining the attributes of school principals as “instructional leaders” (Andrews and Soder 1987, Duke 1987, Gaffney 1989, Hallinger and Heck 1996). Hallinger’s model of instructional leadership identifies three sets of leadership dimensions, within which are ten specific leadership practices. The three dimensions of instructional leadership are:

1. Defining a School’s Mission;
2. Managing the Instructional Program; and
3. Promoting a Positive Learning Climate

(Hallinger 2000).

“Instructional leadership” is a concept that has been explored extensively for decades in research that focuses specifically on studies of school principals, but many other leadership concepts also feature in the literature. A review of leadership articles over the decade 1980 to 1995, identified twenty leadership concepts which the authors

grouped into six categories: instructional; transformational; moral; participative; managerial; and contingent (Leithwood and Duke 1999). There is a great deal of overlap between these concepts, and studies often suggest that an effective school leader displays elements of these six forms of leadership or others, such as “democratic”, “distributed” or “transformational” leadership (Gurr, Drysdale, Di Natale, Ford, Hardy and Swann 2003).

While the concept of instructional leadership remains popular in educational research, Cavanagh *et al.* (2004) point out that the lack of a tight definition of instructional leadership has diluted the original meaning of the concept and diminished its utility. They argue that much research on instructional leadership departs from the original concept of leadership focused on learning.

Although all these conceptions of instructional leadership have elements concerning instruction and leadership, these two elements are respectively supplemented by a variety of other elements. If a synthesis of all the elements were produced, the result would be complex and describe a range of leadership attributes not specifically related to student instruction of to schools (Cavanagh *et al.* 2004: 4).

In their Australian research, Robert Cavanagh and his colleagues build on the concept of instructional leadership by re-defining it in terms of five attributes of “principal leadership of school pedagogy”. The five attributes of principals who lead school pedagogy are:

1. leadership vision or sense of mission about the learning of children;
2. a focus on school-level activities, particularly the work of teachers;
3. recognition of the importance of school culture as a mediating factor in educational change and effective student learning;
4. engagement of teachers to increase their commitment to students and to the school; and
5. steadfast principal leadership dedicated to meeting the educative needs of students

(Cavanagh, MacNeill, Reynolds and Romanoski 2004).

Distributed leadership

During the 1990s, there was a trend for the research to move from a focus on the role of school principals to research that envisages leadership roles for many individuals within schools. Two dominant models in recent literature – distributed leadership and transformational leadership– are representative of this trend. Both models claim to reject the concept of leadership as a set of personal qualities embodied in an exceptional person (the “heroic leader”), and argue for a more realistic perspective that puts leadership within the reach of ordinary people. The two models claim to be oppositional but have much in common, and may well be complementary. The distributed leadership model assumes that effective leadership must be the responsibility of all individuals within an organisation. At its most extreme, this includes individuals without formal positions of authority. Transformational leadership also acknowledges the importance of empowering individuals within an organisation, but suggests that an effective leader in a formal position of authority is essential to achieving such a transformation (Leithwood *et al.* 2004, Covey 1992, Elmore 2002).

Models of distributed leadership tend to define leadership as a set of *functions* distributed among members of a school community. Studies of distributed leadership typically do three things:

- 1) identify the forms or *functions* of leadership that are distributed among the members of a school community;
- 2) identify the *members* to whom these leadership functions are being distributed; and
- 3) define the *processes* by which leadership is distributed in schools.

The organisational *functions* that leaders might be expected to perform include not only instructional leadership functions, but also management functions, relationships with funding agencies and relations with stakeholders and the wider community. The *members* to whom these leadership functions are distributed are generally defined as members of the school community typically charged with exercising leadership, such as principals, deputy principals, program and curricular co-ordinators, senior teachers and so on. However some distributed leadership studies define leaders more broadly and include individuals who are not in formally-designated leadership positions (Smylie, Conley and Marks 2002). The *processes* by which leadership is distributed in schools vary between studies. Eric Camburn and his colleagues, for example, focus on the process of “configuration”, which means “the creation of an organisational structure that formally designates leadership statuses within a school” and the process of “activation” referring to “the social processes that encourage incumbents of these formally-designated leadership positions to actively perform leadership functions” (Camburn, Rowan and Taylor 2003).

A distinguishing feature of the distributed leadership model is that it examines leadership as an organisational *process* rather than as a set of *qualities* possessed by an individual or a group. The rationale given for this approach is that although visionary leadership by one individual can transform an organisation, the change will not be sustainable in the long-term, after the visionary leader moves on. It is also argued that there are simply not enough visionary leaders to fill the positions of authority in schools that need them. Studies of distributed leadership therefore portray leadership as a set of functions that are shared across a segment of the school community (which can be broadly or narrowly defined, depending on the study). The aim of this research is to identify a system of distributed leadership that will support and sustain school effectiveness over the long term (Camburn, Rowan and Taylor 2003, Copland 2003, Elmore 2002).

There is, as yet, no definitive model of distributed leadership. The concept is used to explain various approaches to capacity-building in schools and researchers often add new elements to it in their studies. Nevertheless, the concept of distributed leadership appears in most studies of educational leadership in schools, and more scholars claim to be working within the concept than opposing it. Michael Copland argues that there are three common understandings within the concept of distributed leadership:

1. distributed leadership is a *collective* activity, focused on collective goals, which comprises a quality or energy that is greater than the sum of individual actions (ie. it creates a dynamism that extends beyond simply identifying task responsibility);
2. distributed leadership involves the *spanning* of task, responsibility, and power boundaries between traditionally defined organisational roles (ie. boundary

- spanning activities should be cultivated by distributed leadership systems, rather than simple definitions of roles and responsibilities of principals and teachers); and
3. distributed leadership rests on a base of *expert* rather than hierarchical *authority* (ie. power and authority should be re-distributed towards those who hold expertise, such as teachers, rather than privileging those who hold formal titles)

(Copland 2003: 377-379).

Richard Elmore's concept of distributed leadership is explicitly functional as he argues for a practical and "de-romanticised" conception of leadership that bears no resemblance to trait theories of success. "Leadership is the guidance and direction of instructional improvement" (Elmore 2000: 13). Drawing on the theory of distributed leadership and instructional leadership, he defines the functions associated with leadership roles in five domains: policy (ie. legislators and bureaucrats); professional (researchers and distinguished practitioners); system (superintendents and support personnel); school (principals and support personnel); and practice (teachers, professional developers). Each of these domains encompasses multiple actors and Elmore identifies specific leadership functions related to their roles, illustrated in Attachment D (Elmore 2000: 22).

As the concept of distributed leadership focuses on developing the potential of professional teachers, it is a useful tool for supporting and enhancing the status of teaching. Traditional leadership studies tend to overlook the potential of professional teachers to play a role in school renewal, portraying them as the passive recipients of professional development and as "followers" of principals as leaders. But recent research argues that teachers can and should have a positive impact not only on their students' learning, but also on the culture of their schools and within the wider community (eg. Senge 2000, Crowther, Kaagan, Ferguson and Hann 2002).

Some recent studies of school renewal – drawing on theories about learning organisations from new management literature and concepts of learning communities from adult and community education – envision schools as places where industrial-age assumptions about the role and purpose of education are questioned and the distribution of power within traditional hierarchies of management is challenged. Recent research on "teacher leadership" emphasises the potential of teachers to exercise dynamic leadership in schools and to be a catalyst for social reform (Katzenmeyer and Moller 1996).

Frank Crowther and his colleagues argue that professional teachers should become "teacher leaders" within a new paradigm of teacher professionalism.

A new paradigm for the teaching profession is needed, one that recognises both the capacity of the profession to provide desperately needed school revitalisation and the striking potential of teachers to provide new forms of leadership in schools and communities (Crowther *et al.* 2002: 3).

In their book, *Developing Teacher Leaders* (2002), Frank Crowther and his colleagues argue that “new, dynamic, defensible conceptions of teacher leadership are urgently needed” and they identify six domains in which teacher leadership should be exercised. In this conception of distributed leadership, teacher leaders would:

1. convey convictions about a better world;
2. strive for authenticity in their teaching, learning and assessment practices;
3. facilitate communities of learning through organisation-wide processes;
4. confront barriers in the school’s culture and structures;
5. translate ideas into sustainable systems of action; and
6. nurture a culture of success.

Judyth Sachs also argues for a new concept of teacher professionalism, which defines the teacher as an “activist professional” (Sachs 2000). Based on Anthony Giddens’ notions of “active trust” and “generative politics”, Sachs suggests that “active professionalism”, exercised individually and collectively would create new spaces for action and debate among teachers. She identifies eight broad principles upon which any activist project should be grounded, that “provide the strategic and conceptual scaffolding through which an activist teacher professionalism can be created and sustained”:

1. inclusiveness;
2. collective and collaborative action;
3. effective communication of aims, expectations etc.
4. recognition of the expertise of all parties involved;
5. creating an environment of trust and mutual respect;
6. being responsive and responsible;
7. acting with passion; and
8. experiencing pleasure and fun

(Sachs 2000: 87).

Transformational leadership

Transformational leadership is a process in which the leaders take actions to try to increase their associates’ awareness of what is right and important, to raise their associates’ motivational maturity and to move their associates to go beyond the associates’ own self-interests for the good of the group, the organisation, or society. Such leaders provide their associates with a sense of purpose that goes beyond a simple exchange of rewards for effort provided

(Bolden *et al.* 2003: 16).

In education, transformational leadership refers to school leaders' use of facilitative powers to construct strong school cultures that empower individuals, rather than simply exercise authority over them. It has also been suggested that the authority and influence associated with transformational leadership is not necessarily allocated to those occupying formal administrative positions, although much of the literature focuses on such people, as does the literature on distributed leadership. Leithwood and Jantzi (2000: 113) argue that transformational leadership means that "power can be attributed by organisation members to whomever is able to inspire their commitments to collective aspirations, and the desire for personal and collective mastery over the capacities needed to accomplish such aspirations" (Burns 1978, Hipp and Bredeson 1995, Leithwood 1992, Leithwood and Jantzi 2000).

Like the literature on distributive leadership, definitions of transformational leadership differ slightly between authors. One of the original proponents of the concept, James McGregor Burns (1978) argued that transformational leadership represents the transcendence of self-interest by both leader and led, and can convert followers into leaders, and leaders into moral agents. Bass and Avolio (1994) suggest that transformational leadership is an idealistic concept, the type of leadership that people have in mind when they describe their ideal leader, and a role model with which subordinates are more likely to want to identify. All studies assume that transformational leadership is a behavioural process that is capable of being learned, rather than a set of inherent personal qualities (Covey 1992, Tichy and Devanna 198, Bolden *et al.* 2003).

Bolden and his colleagues draw attention to Covey's comparison between transformational leadership (with its focus on vision and strategies, long-term goals and releasing human potential) and transactional leadership, which focuses on getting a job done within current systems and expectations. They point out that both kinds of leadership are probably necessary, and that transactional leadership remains "the organisational model for many people and organisations who have not moved into or encouraged the transformational role needed to meet the challenges of our changing times" (Bolden *et al.* 2003: 15). In other words, transactional leadership refers to the way in which schools were (and are) traditionally managed, whereas transformational leadership is necessary to implement whole school reform or to change the direction of a school.

The work of Kenneth Leithwood and his colleagues attempts to reconcile the ideal of transformational leadership with the realities of day-to-day school management. Leithwood *et al.* (1996) identify six factors or dimensions of transformational leadership:

1. building school vision and goals;
2. providing intellectual stimulation;
3. offering individualised support;
4. symbolising professional practices and values;
5. demonstrating high performance expectations; and
6. developing structures to foster participation in school decisions.

To these six factors (or functions) – each of which is associated with specific leadership practices and problem-solving processes – Leithwood and Jantzi (2000) subsequently added four management dimensions (ie, transactional leadership functions) to complete their model of transformational leadership in education:

1. staffing;
2. instructional support;
3. monitoring school activities; and
4. community focus.

The concept of transformational leadership implies that a leader should aim to foster capacity development and higher levels of personal commitment to organisational goals on the part of the leader's colleagues. Transformational leadership models assume that whole school change depends on the capacity of individuals, as well as organisations, and requires a high level of motivation and commitment on the part of school leaders to achieve desired outcomes (Leithwood and Jantzi 1999).

The main difference between studies of distributed leadership and transformational leadership is that the distributed leadership studies play down, or ignore the role of the leader at the top of the positional hierarchy. They focus more on the role of other potential leaders within the school, particularly, but not exclusively, teachers. Theories of distributed leadership thus differ from transformational leadership theories in emphasis rather than substance. Although distributive leadership researchers tend to underplay the role of school leaders, such as principals, in giving effect to sustainable school reform, the desired outcome sought by both sets of proponents is to produce a dynamic organisational culture in which leadership is manifested *through* people rather than over them (Leithwood *et al.* 2004).

In summary, over the past two decades, the literature has evolved from studies of educational leadership that focused on people in positions of authority – particularly school principals – to studies of whole school change that emphasise the need for leadership to be distributed among many members of the school community. The concept of instructional leadership (ie. leadership in teaching and learning) is important but is now recognised as not sufficient to guarantee school effectiveness in a more complex educational environment. Although the goal of sustainable school change is a common objective in contemporary leadership research, advocates of transformational leadership continue to emphasise the key role of school principals as agents of change. While acknowledging that many leadership functions should be performed at every level of an organisation, proponents of transformational leadership argue that it is important for some functions to be attached to leaders in formal positions of authority.

What does effective school leadership look like?

Achieving results through others is the essence of leadership.

(Hallinger and Heck 1996: 39).

Effective school leadership should not be seen as a standard set of personal characteristics. Studies of the impact of organisational variables on school effectiveness generally find no common patterns in the personal characteristics of successful school principals. Moreover, there is evidence that educational leaders may behave quite differently (and productively) depending on the circumstances they are facing and the people with whom they are working. In other words, there is no single leadership “style” or set of practices that characterises an effective professional leader of teachers (Gunn *et al.* 2003, Hallinger and Heck 1996, Leithwood and Riehl 2003, McLaughlin and Talbert 2001).

In their review of forty empirical studies of school leadership conducted between 1980 and 1995, Philip Hallinger and Ronald Heck (1996) found that effective leadership by school principals was invariably indirect, because it influences internal school processes that were directly linked to student learning. These internal processes range from school policies and norms (eg. academic expectations, school mission, student opportunity to learn, instructional organisation, academic learning time) to the practices of teachers. The reviewers found that many studies uncovered significant indirect effects of principal leadership on student achievement via these variables. They also found that the most consistent variable to interact positively with principal leadership was “school goals”. But they point out that this variable was measured differently in various studies – from “goal consensus” in some studies to an operational definition (ie. degree of academic focus, principal vision or focus, or principal’s role in communicating a mission) in others (Hallinger and Heck 1996).

Leithwood and his colleagues (2004) suggest that the essence of effective school leadership can be summarised as two generic functions:

- Providing Direction (helping the members of the organisation to set a defensible set of directions); and
- Exercising Influence (influencing others to move in those directions).

Although effective leadership defies precise definition, the research suggests that there are five broad characteristics of successful school leadership:

1. Leadership is a *social* concept. Leadership is not an individual or personal phenomenon but occurs in a social context. It seeks to accomplish something for a group of persons. Leadership is embedded in social relationships to the extent that leadership is more like a “web of relationships” across multiple internal and external constituencies and social networks (Burns 1978, Leithwood and Duke 1999).
2. Leadership involves *purpose and direction*. Leaders must know the ends towards which they are striving and pursue goals with clarity and tenacity. In the current educational reform context, educational leadership is directed towards goals of student learning, rather than simply the technical management functions of the past. Consistent with the social concept of leadership, goals must be “owned” by more than just the leader. Leaders must work with others to create a shared sense of purpose and direction. The imposition of a leader’s goals on others in the face of indifference or resistance is not considered effective leadership (Yukl 1994).

3. Leaders exercise *influence*. Leaders work through and with other people and help establish the conditions that enable others to be effective. The exercise of influence may be direct (through words and action), indirect (helping others to accomplish something), or transformative (lifting the aspirations and actions of others in expansive and sometimes unpredictable ways (Burns 1978, Kouzes and Posner 1995).
4. Leadership is a *function*. Although the leadership role is often vested in persons in positions of formal authority, leadership does not exist unless it is carried out in a functional way. Leadership functions may be carried out by different persons in a range of roles throughout the organisation. In other words, school leaders are those persons who occupy various roles within a school, who provide direction and exert influence in order to achieve the school's goals. Formal leaders – those persons in formal positions of authority – are genuine leaders only to the extent that they fulfill these functions (Leithwood and Riehl 2003).
5. Leadership is *context-sensitive*. Many different people do the work of leadership and they bring different resources and abilities to the task. The way in which they lead is contingent on the setting, the nature of the social organisation, the goals being pursued, the individuals involved, resources, time frames and other factors (Leithwood and Duke 1990).

This field of study may defy standardisation in terms of definitions and conceptual boundaries because *no two schools (and no two school leaders) are alike*. The different contexts of schools – in terms of their staff, students and communities – often demand different leadership qualities, strategies or systems to improve their effectiveness. “Context, particularly facets of the school’s socio-economic environment, appears to influence the type of leadership that principals exercise” (Hallinger and Heck 1996: 37-38).

In summary, there is no single style or set of leadership behaviours suited to all contexts and effective leaders often behave quite differently (and productively) depending on the context in which they are working. Leadership is also a social concept in that it seeks to accomplish something for a group of people. Effective leadership by school principals is invariably indirect because it influences processes that impact on student learning, such as academic expectations, school mission, student opportunity to learn and instructional organisation. At the most simple level, effective leaders perform two generic functions: they *provide direction*, by helping the organisation to set a defensible set of goals; and they *exercise influence* over members of the organisation to move in that direction.

What do effective leaders do?

Broadly speaking, effective leaders interact productively with the larger social and organisational contexts within which they work. Successful school leaders are usually men and women of varied professional backgrounds who work in collaboration with professional teachers and who respect teaching culture. Successful leaders find various ways to support teachers in getting the job done. The leadership of these people appears to be based on a strong and simple commitment to making the school “work” for their students and to building teachers’ commitment and capacity to pursue this collective goal. In schools led by successful leaders, the responsibility for

sustained school improvement tends to be shared – or distributed – among a broad group of members of the school community (Gunn *et al.* 2003, Leithwood and Riehl 2003, McLaughlin and Talbert 2001).

More specifically, from a review of 30 years of research on school leadership, Tim Waters and his colleagues (2003) identify 21 key *responsibilities* or practices of effective school leaders (listed in Attachment C). Other researchers group similar key practices under three broad headings which we will use here (Hallinger and Heck 1999, Conger and Kanungo 1998, Leithwood 1996, Leithwood *et al.* 2004). From the summary provided by Leithwood *et al.* (2004), effective leaders are skilled in three broad areas: Setting Directions; Developing People; and Re-designing the Organisation.

Setting directions

Having clear goals for an organisation is an essential part of effective leadership, and the leadership literature (particularly research on transformational and distributed leadership models) suggests that these goals should be “owned” by the people within the organisation. A shared understanding about the organisation’s goals should assist in building a shared vision or sense of purpose within a school. The type of goals which are set, are also important as people are more likely to be motivated by goals which they find personally compelling, challenging and achievable.

Specific practices that help to set directions for a school are:

- identifying and articulating a vision;
- fostering the acceptance of group goals; and
- creating high performance expectations.

Developing people

Successful educational leaders develop their organisation in ways that support and sustain the performance of individual teachers as well as students. The extent to which leaders can help develop people depends heavily on their knowledge of the business of teaching and learning (often referred to as “instructional leadership” in the North American literature). The ability to develop people also depends on skills in building relationships and in managing the highly social context of schooling.

Specific practices that help to develop people include:

- providing intellectual stimulation;
- providing individualised support; and
- empowering others to make decisions.

Re-designing the organisation

The focus on a leader’s role in re-designing an organisation derives from the policy agenda for performance-based school reform, in that it assumes that organisations need to change, to meet new expectations about accountability for student learning

outcomes. Transformational leaders should therefore be willing to change the status quo and be capable of implementing school reform to support new goals. Practices associated with re-designing an organisation are:

- strengthening school culture;
- modifying organisational structures; and
- building collaborative practices.

In summary, there are many practices associated with effective leadership in schools. At least 21 practices associated with balanced leadership have been identified in the research literature over the past thirty years. These practices can be grouped under three broad categories which have been described as “the basics” of successful leadership today. In an era that requires schools to be sites of educational reform and continuous improvement, effective leaders must be capable of: Setting Directions; Developing People; and Re-designing the Organisation.

Approaches to leadership learning

Continuing education for educational leaders needs to be planned, sequential and linked to a professional structure which accredits and recognises their learning. (Ramsey 2000: 88).

Although successful leadership is defined in the education literature in terms of the functions or responsibilities that leaders in schools must carry out effectively, many leadership development programs focus on developing behaviours, skills and attitudes of leaders in a competency-based approach. In a comprehensive review of competency-based leadership programs across many organisations (not just in education), Richard Bolden and his colleagues conclude that a somewhat limited version of ‘transformational’ leadership is being promoted. “Leadership... is conceived as a set of values, qualities and behaviours exhibited by the leader that encourage the participation, development and commitment of followers.” The danger of this approach, they warn, is that the list of desirable qualities in a leader becomes so endless and unwieldy, that we arrive at an “almost evangelistic notion of the leader as a multi-talented individual with diverse skills, personal qualities and a large social conscience”. They point out that this comes very close to the traditional trait or “hero” approach to leadership that has proved of little practical use (Bolden *et al.* 2003: 37).

Another criticism of much professional learning in school education is that it is short-term and *ad hoc* in nature. Programs tend to take participants out of their working environment and are not customised to meet individual learning needs. There is minimal evaluation of leadership learning programs. While short-term post-course evaluations (“happy sheets”) are common, there is very little long-term research to investigate whether professional learning programs result in any behavioural, attitudinal or organisational changes on the ground (Bolden *et al.* 2003, Leithwood *et al.* 2004, Senate 1998).

School leadership development bodies in the USA and UK now appear to be addressing these issues in their planning frameworks. According to the US National Staff Development Council, leadership development programs should be:

- long-term rather than episodic;
- job-embedded rather than detached;
- carefully planned with a coherent curriculum; and
- focused on student achievement

(Sparks and Hirsch 2000, in Leithwood *et al.* 2004).

The National College for School Leadership in the United Kingdom has decided to provide leadership development throughout a leader's career. The College has identified five different stages in a school leader's career and aims to provide programs specific to each stage. The stages are:

1. **Emergent leadership** – when a teacher is beginning to take on management and leadership responsibilities and may aim to become a head teacher;
2. **Established leadership** – comprising assistant and deputy heads who are experienced leaders but who do not intend to pursue headship;
3. **Entry to headship** – including a teacher's preparation for and induction into the senior post in a school;
4. **Advanced leadership** – the stage at which school leaders mature in their role, look to widen their experience, to refresh themselves and to update their skills; and
5. **Consultant leadership** – when an able and experienced leader is ready to put something back into the profession by taking on training, mentoring, inspection or other responsibilities.

The programs offered to participants at each of the five career stages are based on ten propositions that reflect the values (1-3), nature (4-7) and development (8-10) of school leadership (detailed in Attachment E). In brief, the propositions are that school leadership should:

1. be purposeful, inclusive and values driven
2. embrace the distinctive and individual context of the school
3. promote an active view of learning
4. be instructionally focused
5. be distributed throughout the school community
6. build capacity by developing the school as a learning community
7. be “futures” oriented and strategically driven
8. be developed through experiential and innovative methodologies
9. be served by a support and policy context that is coherent and implementation driven
10. be supported by a National College that leads the discourse around leadership for learning

(Hopkins 2001: 16).

The type of programs offered by the National College at each of the five career stages are illustrated in Table 2. In addition, the College provides strategic programs, partnerships programs and short skills development programs for school leaders. (NCSL 2005).

Table 2 NCSL Leadership Development Framework, Career Stages and Programs

Career Stage	Leadership Development Programs
1. Emergent Leadership	Programs drawing on the distributed leadership concept, such as <i>Leading from the Middle</i> Program, which aims to help people develop generic skills such as: motivating others; organising the work of staff; using performance data; coaching; team-building; developing consistent standards of behaviour.
2. Established Leadership	Programs not yet developed.
3. Entry to Headship	<i>National Professional Qualification for Headship (NPQH)</i> - a threshold qualification for Headship that is now mandatory and conducted in ten regional centres. <i>The Head Teacher's Induction Program</i> – a tightly structured program aiming to support a new headteacher and apply the knowledge gained from the NPQH. Program includes: <ul style="list-style-type: none"> • An initial needs assessment; • A requirement to compile a leadership development profile; • Entitlement to support of a mentor and membership of a learning network; • Modules geared to individual learning needs; • Core modules on: Raising pupil attainment; securing a positive ethos and maintaining high standards of behaviour; • leading staff and leading teams; working with a governing body; and streamlining internal administration.
4. Advanced Leadership	Range of programs for serving head teachers with more than four years' experience, in areas such as change management, school renewal, futures thinking, inter-personal effectiveness, and international visits and business placements.
5. Consultant Leadership	Programs in teaching, mentoring, inspecting and contributing to the work of the College.
Strategic programs	Programs for headteachers and leaders in new areas, such as: ICT; inspection skills; city schooling; school improvement; leading an inclusive school; addressing under-achievement among ethnic minorities; behaviour and discipline..
Partnership programs	Programs offered in partnership with other organisations in the business and private sector.
Short Skills courses	Interview techniques, preparation of a resume, making presentation, personnel management, health and safety issues offered on a regional basis.

Source: National College for School Leadership (NCSL) 2005. Leadership Development Framework. NCSL website >http://ncsl.org.uk/the_college/college_publications/ldf.cfm<

The Ramsey Report recommends that programs available to current and aspiring educational leaders should:

- be intellectually challenging and in general have a strong academic base, including opportunities for pedagogical and school-based research;
- be structured, where appropriate, as an interdisciplinary study, particularly to meet the needs of senior educational leaders; and
- lead to a recognised credential which is valued by employers, fitting within a sequential framework which accredits teachers for their further learning

(Ramsey 2000: 89).

Australia does not have a national professional development body for school leaders comparable to those overseas. There are many professional associations for educational leaders at the state and national level, and most of these offer leadership development courses. The main providers appear to be the Australian Principals' Association's Professional Development Council (APAPDC) and the Australian Principals' Centre (APC). The Australian Council for Educational Leaders (ACEL) is also a major national professional association for educational leaders. These organisations have a role in leadership development, particularly through conferences and seminars. The Australian Principals' Centre offers courses tailored to career development, within the categories of: Initial Leadership and Management Training; Preparing for Principalship; and Building Leadership Capacity (Australian Principals' Centre 2005).

The Leadership Centre of Western Australia and the South Australian Centre for Leaders in Education are two examples of government involvement in leadership development at the state level. In Western Australia, the Department of Education and Training in co-operation with associations representing school leaders, has established the Leadership Centre of Western Australia with the intention of raising the standards of school leadership in government schools. It has developed a Leadership Framework that assists school leaders to review their role and practice and to enhance their continuing development. The Centre has developed links with a number of Western Australian Universities and has negotiated credit with some of those universities for Leadership Centre Certified Programs, such as the modules of the Leadership Centre's Certificate of Management. Subjects covered in the Leadership Certificate are: regulatory framework; finance and budgeting; human resources; and planning and accountability. The Centre also provides fellowship projects, women in leadership courses, 360-degree feedback, a summer institute and school-based action research (Leadership Centre 2005).

In South Australia, the Centre for Leaders in Education offers an extensive range of short courses (of 1-4 days duration) on current leadership issues. The courses cover topics such as: Leader's Briefing; sustaining leadership in schools; learning-centred leadership; writing applications and preparing for interviews; teamwork; strategic resource management; leadership development; planning and evaluation; trust, ethics and values; and conflict resolution. The Centre also accredits masters-level programs in school leadership offered by local universities, in the areas of: curriculum leadership; financial management; and educational leadership and management-on-line (South Australia 2005).

In summary, many leadership learning programs are criticised for being short-term and *ad hoc* in nature and not customised to meet an individual's learning needs at different stages of their career. New leadership programs that aim to support leaders throughout their working lives should be:

- long-term rather than episodic;
- job-embedded rather than detached;
- carefully planned with a coherent curriculum; and
- focused on student achievement.

In Australia, a range of organisations is involved in the provision of leadership learning at both the national and state level. In South Australia and Western Australia, the state governments have established leadership centres that are working towards the systematic provision of leadership development. There is a range of short courses provided in specific skills development, some accredited post-graduate qualifications and some evidence of leadership courses being targeted to particular stages of a leader's career.

Approaches to professional development for teaching

Schools, as organisations, aren't designed as places where people are expected to engage in sustained improvement of their practice, where they are supported in this improvement, or where they are expected to subject their practice to the scrutiny of peers or the discipline of evaluations based on student achievement (Elmore 2002: 4).

There are many barriers to the implementation of successful professional development for teaching in schools. Richard Elmore argues that the traditional norms of teaching imply that teachers are vested with the knowledge and skills to do their job during pre-service training and that experience "on the job" is sufficient to develop their professional skills and knowledge. Elmore suggests that compared to many other people-based organisations in the knowledge economy, schools are particularly poorly equipped to develop their human resources, and systematically under-invest in professional development (Albert Shanker Institute 2002).

On the other hand, schools have faced numerous and conflicting challenges over the past decade that have placed enormous demands on professional development budgets and priorities. Major issues such as curriculum reform, behaviour management, standards-based assessment and the introduction of information and communications technologies (ICT), to name a few, have all placed competing demands on teachers' professional learning. The highly politicised context of school education means that resources are frequently allocated to address a particular issue without any preliminary research and development (Louis 1998). For example, significant resources continue to be allocated to support the introduction of computer technology in schools, while the research base on the usefulness of ICT for teaching and learning is still evolving (Russell and Bradley 1997).

In this climate of budgetary restraint and politicised education policy agendas, high cost but highly beneficial professional learning in areas such as curriculum development often competes unfavorably with low-cost short-term projects that address immediate needs. The recent Senate report into the status of teaching criticised

current arrangements for professional development in Australia as being “piecemeal” and “*ad hoc*” in nature (Senate 1998). Without a major investment in professional development, guided by long-term policy priorities, substantial educational reform is unlikely to be achieved (Brybee 1997, Fuller and Steinberger 1991).

The impact of under-investment in professional development is illustrated by research into teacher’s attitudes. A study commissioned by the UK Council for Science and Technology into the prospects for developing a continuous professional development (CPD) culture among science teachers identified a number of difficulties faced by teachers in participating in professional development, such as: a sense of isolation working alone in their classroom; inadequate provision of accessible professional development relevant to their needs; insufficient opportunity to collaborate and learn from each other; and little time to assess and make use of the extensive range of curricular materials available from various public and private sources (Dillon, Osborne, Fairbrother and Kurina 2000).

Elmore points out that the performance-based accountability movement provides a strong impetus for investing in professional development for teachers. The question is what form that investment should take. Research suggests that professional development for teachers can be linked successfully to the improvement of practice that results in improved student learning outcomes. The most effective forms of professional development are sensitive to the contextual factors in schools as well as the needs of individual teachers (Anderson and Michener 1994, Elmore 2002, Albert Shanker Institute 2002, Newmann and King 2000, Council for Science and Technology 2000). Although there is some variation in the factors identified as essential for effective professional development, there are many common elements. Drawing on Elmore’s (2002) categorisation and other research evidence, effective professional development:

- is aligned with the clearly defined mission and purpose of the organisation;
- is based on content-specific analyses of student learning;
- is focused on specific issues of curriculum and pedagogy;
- identifies learning outcomes;
- develops, reinforces and sustains group work;
- depends on the active participation of school leaders and staff;
- sustains focus over time, eg. develops a culture of continuous professional development (CPD);
- offers models of effective practice; and
- uses assessment and evaluation.

Mission and purpose

A clearly defined mission and purpose is essential for organisational change and the literature suggests that successful professional development activities should be aligned with that mission and purpose.

In the current context of performance-based accountability for educational outcomes, the mission and purpose of schools is usually focused on the improvement of student learning as a central and unifying goal. If the school is focused on this outcome, and the professional development is aligned with this objective, it is less likely that time

and money for professional development will be diverted into peripheral activities. The type and form of the professional development will vary according to the different contexts of schooling, but this should not matter if the programs are aligned with the mission and purpose of the school to support and improve student learning (Anderson and Michener 1994, Elmore 2002, Leiberan 1995).

Analyses of student learning

If professional development is to be focused on student learning, it needs to be designed to address the specific difficulties encountered by the students within a particular school. It is not sufficient to “encourage teachers to collaborate and hope for the best” (Burnette 2002: 3). In building a professional learning community, Burnette (2003) encouraged groups of teachers in her school to focus on questions such as:

- Are we clear on what students are to learn and the evidence they must show that they have learned it?
- Based on our analysis of student achievement data, what are the strengths and weaknesses of our students’ performance?
- How will we judge the quality of student work?
- How does our curriculum align with state standards and state tests?

Guskey (1995) refers to this process and “Think big, start small”, pointing out that the change involved is dynamic and large scale but in practice it is implemented through a series of smaller steps.

Specific issues of curriculum and pedagogy

Based on a careful analysis of student learning outcomes, professional development should be directed to solving questions relating to the content and pedagogy of instructional practices in a school. For example, Elmore (2002) suggests that a primary school with persistently low reading scores might focus its professional development activities on instructional strategies to improve student skills in decoding and comprehension. This approach to professional development is explicitly practical, in the sense that it aims to address a particular problem. Elmore points out that the norms and beliefs of teachers are more likely to change as a result of this practical, problem-solving approach, than an approach that provides them with theories in the hope that it will change their practice (Albert Shanker Institute 2002).

Identified learning outcomes

Professional development programs for teachers should be delivered by agencies with a clear understanding of how adult learning occurs and the forms of delivery that promote effective adult learning. Elmore (2002) says that those engaged in professional development should be willing to say explicitly what new knowledge and skills will be acquired as a consequence of their participation, how this new knowledge and skill will be manifested in professional practice, and what specific activities will lead to this learning.

Group learning

Traditionally, professional development has been very individualistic, focused on meeting the development need of teachers in classrooms (Dillon, Osborne, Fairbrother and Kurina 2000). In their review of science teaching in Australia, Goodrum, Hackling and Rennie (2001) point out that collaboration between teachers is essential for improving the quality of teaching. They point out that teachers working alone in classrooms have limited potential to change their practice – it is only by working together that productive gains can be made. Newmann and King identify three factors critical to teacher learning and improved student achievement: 1) ongoing opportunities to study, experiment with, and receive helpful advice; 2) collaboration with professional peers in and outside school; and 3) coherent staff and student learning programs (Newmann and King 2000).

While it is important to develop skills at an individual level, there is an urgent need for teachers to learn how to work collectively on problems of practice, both within their own schools and with practitioners in other settings through networks. This view is based on the assumption that:

- learning collaboratively is potentially more powerful than learning on an individual basis;
- as educators often face common problems, they are more likely to learn productively in groups;
- the primary purpose of professional development is improve schools and school systems, not merely to develop individuals who work in them; and
- development, reinforcement and support for group learning is more likely to contribute to a school and system culture of continuous professional development.

Active participation of leaders and staff

Effective group learning and a culture of continuous professional development is unlikely to be sustained in a school without the support of educational leaders. Sustained, collaborative professional development requires the active support of school leaders, and not merely in terms of the allocation of time and school resources. Leaders must ensure that the professional development activities are focused on clear purposes so that valuable staff time and resources are not wasted on poorly directed activities. Leaders must also establish strong lines of communication between participants through detailed feedback processes. Leaders play an important role in initiating discussions about curriculum and pedagogy, supporting group learning, encouraging experimentation, fostering cooperation and building professional respect. Such activities sharpen the focus of professional development on shared purposes and contribute to the establishment of a culture of continuing professional development (Elmore 2002, Fullan et al. 1989, Burnette 2002).

Sustained focus over time

The broad mission and goals that shape professional development should reflect a path of continuous improvement in student learning. This process is referred to in the literature as developing a culture of continuing professional development (CPD) or transforming the school into a professional learning community. An increasing body of research suggests that real change in schools requires the development of strong professional learning communities (Marks and Louis 1998, Kruse, Louis and Bryk 1995).

This idea draws on evidence that some of the most effective forms of professional development are school-led and school-based. The school as a professional learning community should be equipped to move on to new objectives as they reach their original goals, building on existing successful practice and continuously improving professional practice in the priority areas. Eventually, new professional development programs should be regarded as a natural part of a professional's repertoire and will be built into the organisation's normal structures and practices. Once they become used almost out of habit, this will open the door to further learning, continued sharing and routine upgrading of knowledge and skills (Burnette 2002, Elmore 2002, Gusky 1995).

DuFour and Eaker (1998) summarise the characteristics of a professional learning community as a school where:

- people are united by a common purpose, shared vision, collective commitments, and specific, measurable goals;
- collaborative teams engage in action research and collective inquiry into the big questions of teaching and learning;
- continuous improvement cycles are built into the routine practices of the school; and
- gathering evidence of student learning is a constant focus.

Models of effective practice

If professional development is to be responsive to issues of student learning, it should be delivered in contexts that are as close as possible to where teaching occurs. Successful professional development is more likely to occur in schools and classroom settings, rather than off-site, and should involve working with individual teachers or groups of teachers focused on the actual work of teaching. This implies that those who deliver professional development should be able to model expert practice to the participants in their programs (Elmore 2002).

Assessment and evaluation

Professional development is the key to lasting reform in school education, yet there is little systematic evaluation of the effectiveness of professional development activities (Elmore 2002, Fishman *et al.* 2003). If governments intend to make long-term investments in professional development, they need evidence of their efficacy of the programs. Rigorous long-term evaluation is particularly important if schools and systems are to compare the cost-effectiveness of different models. At the school level, the participants in professional development programs should actively monitor student learning outcomes and evaluate the outcomes of professional development programs in terms of their own effectiveness as teachers. At a system level, administrators need to build a knowledge base that enables them to compare the cost-effectiveness of competing professional development programs. "Such as knowledge base would contain evidence-based propositions as to what type of professional development strategies, when used in particular sites with particular media, lead to teacher learning of content that is related to student learning" (Fishman *et al.* 2003" 31).

In summary, for many years, school systems have under-invested, compared with other professions and industries, in professional development for staff and have failed to support professional learning on a sustained basis. The pace of educational change puts pressure on professional development budgets to deal with immediate issues – such as behaviour management, standards-based assessment and the introduction of information and communications technologies (ICT) – often at the expense of sustained long-term professional development. Research suggests that inadequate professional development provision: increases teachers' sense of isolation; fails to meet their professional learning needs; reduces opportunities for teachers to collaborate and learn from each other; and gives them little time to assess and make use of the extensive range of curricular materials available.

Recognition of the vital role of schools in the knowledge economy should provide a strong impetus for the provision of continuous professional development for teachers that – with adequate funding and effective leadership – may support the transformation of schools into professional learning communities. Research suggests that, in the context of improving student learning in schools, effective professional development provision should have the following features. It should:

- be aligned with the clearly defined mission and purpose of the organisation;
- be based on content-specific analyses of student learning;
- be focused on specific issues of curriculum and pedagogy;
- identify learning outcomes;
- develop, reinforce and sustain group work;
- depend on the active participation of school leaders and staff;
- have a sustained focus over time, eg. develop a culture of continuous professional development (CPD);
- offer models of effective practice; and
- use assessment and evaluation.

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Attachments

Attachment A: Framework of National Board Standards and Certificates

Subject Areas	Certificates
Generalist	Early Childhood
	Middle Childhood
Art	Early and Middle Childhood
	Early Adolescence through Young Adulthood
Career and Technical Education	Early Adolescence through Young Adulthood
English as a New Language	Early and Middle Childhood
	Early Adolescence through Young Adulthood
English Language Arts	Early and Middle Childhood/Literacy-Reading Language Arts
	Early Adolescence
	Adolescence and Young Adulthood
Exceptional Needs	Early Childhood through Young Adulthood
Library Media	Early Childhood through Young Adulthood
Mathematics	Early Adolescence
	Adolescence and Young Adulthood
Music	Early and Middle Childhood
	Early Adolescence through Young Adulthood
Physical Education	Early and Middle Childhood
	Early Adolescence through Young Adulthood
School Counselling	Early Childhood through Young Adulthood
Science	Early Adolescence
	Adolescence and Young Adulthood
Social Studies – History	Early Adolescence
	Adolescence and Young Adulthood
World Languages other than English	Early Adolescence through Young Adulthood

The developmental levels are:

- Early Childhood (Ages 3-8)
- Early Childhood through Young Adulthood (Ages 3-18 + Exceptional needs)
- Middle Childhood (Ages 7-12)
- Early and Middle Childhood (Ages 3-12)
- Early Adolescence (Ages 11-15)
- Adolescence and Young Adulthood (Ages 14-18+)
- Early Adolescence through Young Adulthood (ages 11-18+)

The fourteen Source: NBPTS 2005. *Framework of National Board Standards and Certificates*. >http://www.nbpt.org/standards/stds_framework.cfm<

Attachment B:

Definition of Professional Misconduct under the Ontario College of Teachers Act

The following acts are defined as professional misconduct for the purpose of subsection 30 (2) of the Act:

1. Providing false information or documents to the College or any other person with respect to the member's professional qualifications.
2. Inappropriately using a term, title or designation indicating a specialisation in the profession which is not specified on the member's certificate of qualification and registration.
3. Permitting, counselling or assisting any person who is not a member to represent himself or herself as a member of the College.
4. Using a name other than the member's name, as set out in the register, in the course of his or her professional duties.
5. Failing to maintain the standards of the profession.
6. Releasing or disclosing information about a student to a person other than the student or, if the student is a minor, the student's parent or guardian. The release or disclosure of information is not an act of professional misconduct if, the student (or if the student is a minor, the student's parent or guardian) consents to the release or disclosure, or if the release or disclosure is required or allowed by law.
7. Abusing a student physically, sexually, verbally, psychologically or emotionally.
8. Practising or purporting to practise the profession while under the influence of any substance or while adversely affected by any dysfunction, which the member knows or ought to know impairs the member's ability to practise, and in respect of which treatment has previously been recommended, ordered or prescribed but the member has failed to follow the treatment.
9. Contravening a term, condition or limitation imposed on the member's certificate of qualification and registration.
10. Failing to keep records as required by his or her professional duties.
11. Failing to supervise adequately a person who is under the professional supervision of the member.
12. Signing or issuing, in the member's professional capacity, a document that the member knows or ought to know contains a false, improper or misleading statement.
13. Falsifying a record relating to the member's professional responsibilities.
14. Failing to comply with the Act, the regulations or the bylaws.
15. Failing to comply with the Education Act or the regulations made under that Act, if the member is subject to that Act.
16. Contravening a law if the contravention is relevant to the member's suitability to hold a certificate of qualification and registration.
17. Contravening a law if the contravention has caused or may cause a student who is under the member's professional supervision to be put at or to remain at risk.
18. An act or omission that, having regard to all the circumstances, would reasonably be regarded by members as disgraceful, dishonourable or unprofessional.
19. Conduct unbecoming a member.
20. Failing to appear before a panel of the Investigation Committee to be cautioned or admonished, if the Investigation Committee has required the member to appear under clause 26(5)(c) of the Act.
21. Failing to comply with an order of a panel of the Discipline Committee or an order of a panel of the Fitness to Practise Committee.
22. Failing to co-operate in a College investigation.
23. Failing to take reasonable steps to ensure that requested information is provided in a complete and accurate manner if the member is required to provide information to the College under the Act and the regulations.
24. Failing to abide by a written undertaking given by the member to the College or an agreement entered into by the member with the College.
25. Failing to respond adequately or within a reasonable time to a written inquiry from the College.
26. Practising the profession while the member is in a conflict of interest.
27. Failing to comply with the member's duty under the Child and Family Services Act.

Source: Ontario College of Teachers 2005 website. >http://www.oct.ca/en/InvestigationsHearings/misconduct-regulation_E.asp?path=octweb_e:3_0<

Attachment C: Responsibilities of Balanced Leadership

Responsibilities	<i>The extent to which the principal ...</i>
Culture	fosters shared beliefs and a sense of community and cooperation
Order	established a set of standard operating procedures and routines
Discipline	protects teachers from issues and influences that would detract from their teaching time or focus
Resources	provides teachers with materials and professional development necessary for the successful execution of their jobs
Curriculum, Instruction, Assessment	is directly involved in the design and implementation of curriculum, instruction, and assessment processes
Focus	establishes clear goals and keeps those goals in the forefront of the school's attention
Knowledge of Curriculum, Instruction, Assessment	is knowledgeable about curriculum, instruction, and assessment processes
Visibility	has quality contact and interactions with teachers and students
Contingent Rewards	recognises and rewards individual accomplishments
Communication	establishes strong lines of communication with teachers and among students
Outreach	is an advocate and spokesperson for the school to all stakeholders
Input	involves teachers in the design and implementation of important decisions and policies
Affirmation	recognises and celebrates school accomplishments and acknowledges failures
Relationship	demonstrates an awareness of the personal aspects of teachers and staff
Change Agent	is willing to and actively challenges the status quo
Optimiser	inspires and leads new and challenging innovations
Ideals/Beliefs	communicates and operates from strong ideals and beliefs about schooling
Monitors/evaluates	monitors the effectiveness of school practices and their impact on student learning
Flexibility	adapts his or her leadership behaviour to the needs of the current situation and is comfortable with dissent
Situational Awareness	is aware of the details and undercurrents in the running of the school and uses this information to address current and potential problems
Intellectual stimulation	ensures that faculty and staff are aware of the most current theories and practices and makes the discussion of these a regular aspect of the school's culture

Source: Waters, Tim., Robert J. Marzano and Brian McNulty 2003. *Balanced Leadership: what 30 Years of research tells us about the effect of leadership on student achievement. Working Paper*. Aurora, CO: Mid-continent Research for Education and Learning. >www.mcrel.org<

Attachment D: Leadership Roles and Functions

Leadership Roles	Leadership Functions
POLICY Elected, appointed officials: Legislators, Chief State school officers, state board members, local school board members	<ul style="list-style-type: none"> • Set performance targets • Approve standards • Monitor performance • Approve, monitor incentive structures • Monitor design problems, redesign • Adjudicate conflicts over design, performance issues • Administer rewards and sanctions • Buffer non-instructional issues
PROFESSIONAL Distinguished Practitioners, Professional Developers, Researchers	<ul style="list-style-type: none"> • Develop, vet standards • Develop, pilot new instructional practices • Design pre-service, in-service learning • Conduct model professional development • Create benchmarks for content, practice • Develop, pilot new structures
SYSTEM Superintendents, support personnel	<ul style="list-style-type: none"> • Design system improvement strategies • Design, implement incentive structures for schools, principals, teachers • Recruit, evaluate principals • Provide professional development consistent with improvement strategy • Allocate system resources toward instruction • Buffer non-instructional issues from principals, teachers
SCHOOL Principals, support personnel	<ul style="list-style-type: none"> • Design school improvement strategies • Implement incentive structures for teachers, support personnel • Recruit, evaluate teachers • Broker professional development consistent with improvement strategy • Allocate school resources towards instruction • Buffer non-instructional issues from teachers
PRACTICE Teachers, Professional Developers	<ul style="list-style-type: none"> • Design, conduct, participate in professional development • Participate in recruitment, hiring of new teachers • Evaluate professional development • Consult, evaluate professional practice of colleagues • Evaluate student work • Participate in development of new professional development practices

Source: Elmore Richard F. 2000. *Building a new structure for school leadership*. Washington DC. Albert Shanker Institute: 22

Attachment E:

Ten Propositions for Transforming Learning

Proposition:	Implications For School Leadership:
<i>The values of school leadership</i>	
1. School leadership must be purposeful, inclusive and values driven	<ul style="list-style-type: none"> • A commitment to equity, empowerment and high standards of learning and achievement as the moral purpose of education • An impetus for transforming the school as a learning community for students and teachers, adequate to the expectations of a knowledge society and economy
2. School leadership must embrace the distinctive and inclusive context of the school	<ul style="list-style-type: none"> • School leadership must embrace the context of the school in all its complexity as a first step to utilising proven practices from elsewhere • The particular mix of skills of school leadership will differ, often dramatically from context to context
3. School leadership must promote an active view of learning	<ul style="list-style-type: none"> • School leaders regard the design, management and monitoring of settings for active learning as their key task • School leaders create the conditions and provide the support to enable teachers to improve student learning, encouraging the creation and dissemination of professional knowledge of learning strategies (including e-learning) that work in classrooms and schools
<i>The nature of school leadership</i>	
4. School leadership must be instructionally focused	<ul style="list-style-type: none"> • School leaders are expert in designing, managing and monitoring the instructional process • School leaders are also skilful in the organisation, strategic, instructional, personal and inter-personal domains
5. School leadership is a function that needs to be distributed throughout the school community	<ul style="list-style-type: none"> • School leadership is an activity that is spread across the school community • Schools that wish to constantly evolve will need to harness their human and social capital that is their richest potential, creating and sharing the leadership opportunities that provide the capacity to achieve this
6. School leadership must build capacity by developing the school as a learning community	<ul style="list-style-type: none"> • School leaders must understand the concept of capacity and its constituent elements • School leaders can lead and manage the transformation of the school culture
7. School leadership must be futures oriented and strategically driven	<ul style="list-style-type: none"> • A realisation that educational change is complex, non-linear, frequently arbitrary, and often characterised by unpredictable shifts and fragmented initiatives • School leaders can lead the school as an organisation through balancing development and maintenance in the context of both improvement and transformation
<i>Developing and supporting school leadership</i>	
8. School leadership must be developed through experiential and innovative methodologies	<ul style="list-style-type: none"> • An increasing emphasis on an applied knowledge base, on problem framing and solving, with an on-the-job or field based focus, often involving team learning and a responsiveness to need and stage of development • The most valued expertise about school leadership will increasingly reside in the leaders of the profession itself, so by promoting shared learning and innovation and creativity

9. School leadership must be served by a support and policy context that is coherent, systemic and implementation driven.	<ul style="list-style-type: none">• That policy makers continually keep the 'big picture' in mind in searching for connections and ways of exploiting potential synergy• A competence in using external support rather than being used by it together with a facility in creating and exploiting networks
10. School leadership must be supported by a National College that leads the discourse around leadership for learning	<ul style="list-style-type: none">• The National College leads the discourse around leadership for learning• The National College takes the leading national role in co-ordinating policies and initiatives for the leadership of school improvement and transformation

Source: Hopkins David 2001. *"Think Tank" report to governing council*. National College for School Leadership, UK.
> <http://ncsl.org.uk><